

School-Based Mental Health Research

Guidance for researchers, practitioners, schools

Michelle Dyer, Helena Tuomainen

March 2022



Address for correspondence:

Dr Helena Tuomainen
Assistant Professor of Youth Mental Health
Warwick Medical School
University of Warwick
Coventry CV47AL

helena.tuomainen@warwick.ac.uk

We would like to acknowledge that this work was supported by the National Institute for Health Research (NIHR) Clinical Research Network West Midlands (CRN WM) [Improvement and Innovation Strategic Funding] and the National Institute for Health Research (NIHR) Applied Research Collaboration (ARC) West Midlands. The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care. We would like to thank Paul Patterson for valuable feedback regarding the initial drafts of this report.

Contents

1	Key findings, including expert recommendations – executive summary	1
1.1	Challenges to facilitating school-based mental health research.....	1
1.2	Facilitating school-based mental health research.....	2
1.3	Recommendations from Stakeholders	3
1.4	Structure of report.....	3
2	Background	4
2.1	Mental health and wellbeing interventions in schools	4
2.2	Problems associated with implementing interventions.....	4
2.3	Effective interventions require research in schools	5
3	Methodology.....	6
3.1	Aims and key research questions	6
3.2	Research setting and approach	6
3.3	Stakeholders	6
3.4	Data Collection and analysis.....	7
4	General feedback	8
4.1	Mental health needs within schools.....	8
4.2	School culture	9
4.3	Current strategies in schools	10
4.4	Benefits of school-based research.....	10
5	Key findings	12
5.1	Challenges of school-based mental health research.....	12
5.1.1	Research-based challenges.....	12
5.1.2	School-based challenges.....	14
5.1.3	Technology-based challenges	15
5.2	Facilitators enabling school-based mental health research.....	16
5.2.1	Research-based facilitators.....	17
5.2.2	School-based facilitators.....	20
5.2.3	Technology-based facilitators.....	21
5.3	Recommendations by Stakeholders	21
5.3.1	Challenging mental health stigma	21
5.3.2	Supporting a research culture in schools.....	22
5.3.3	Study design	22
5.3.4	Engagement	23
5.3.5	Collaboration.....	23
5.3.6	Funding.....	24

5.4	Impact of COVID-19	24
5.4.1	Disruption.....	24
5.4.2	Renewed interest in mental health research	25
5.4.3	Digital working	25
5.4.4	Research design	26
5.5	‘Breathe digital’ as a digital research tool	26
6	Discussion.....	28
6.1	Challenges.....	28
6.2	Facilitators.....	28
6.3	Recommendations by stakeholders	28
6.4	Reflection on findings	29
6.5	Comparison with other literature.....	30
6.6	Limitations	31
7	References.....	32

Glossary

CAMHS	Child and Adolescent Mental Health Services
CRN	Clinical Research Network
CYP	Children and Young People
MHST	Mental Health Support Team
PSHE	Personal, Social and Health Education
SENCO	Special Educational Needs Co-ordinator
SH	Stakeholder (study participant)
SMHL	Senior Mental Health Lead
WSA	Whole School Approach

1 Key findings, including expert recommendations – executive summary

This report explores some of the strategic issues and challenges in engaging schools, teachers and pupils in school-based mental health research in a UK context, and outlines practical and strategic issues related to conducting research for descriptive or intervention studies. The report is aimed at anyone involved in mental health research in schools, although many of the findings are relevant to other health-related research topics.

The report draws on recent school-based mental health research experience in the West Midlands and elsewhere across the UK. The primary research questions that guided data collection for this report were:

- What are the key challenges faced when conducting school-based mental health research?
- What facilitates the implementation of school-based mental health research?

Between July 2020 and April 2021, we engaged 18 Stakeholders (SH)* from the West Midlands and elsewhere across the UK in data collection, primarily semi-structured in-depth interviews. Many of the Stakeholders have worked in the field of school-based (mental) health research for well over ten years. The Stakeholders included two members of two Clinical Research Networks (CRN), ten members of former CLAHRC (Collaborations for Leadership in Applied Health Research and Care) or current ARC (Applied Research Collaboration) researchers, two researchers working in the charity sector, two schoolteachers, one chair of governors, and one educational psychologist. Additionally, three focus groups involved a further 23 ARC researchers, including two moderators in each group.

The main findings are listed under three themes: Challenges to school-based mental health research; Facilitators that ease engagement and the research process; and Expert recommendations for improving the field of school-based mental health research. While the challenges and facilitators reflect actual experiences, the recommendations contain insight from the Stakeholders who have been involved with school-based mental health (research) for a considerable length of time.

****Note regarding terminology:** We will use the term Stakeholder (with capital 'S'), with SH as acronym, to indicate the people who were interviewed for this project. The term stakeholder (with small 's') will be used to indicate other key players in the field.*

1.1 Challenges to facilitating school-based mental health research

Challenges associated with the effective delivery of school-based mental health research included:

- study design issues
- communication problems
- lack of time
- little support from CRN (eligibility issues) and strategic collaboration
- school priorities
- lay understanding of mental health research
- accessibility
- digital reducing engagement

Challenges were categorised as either school-based, research-based or technology-based. Figure 1 presents each theme and its key points, related to the context from which it derives.

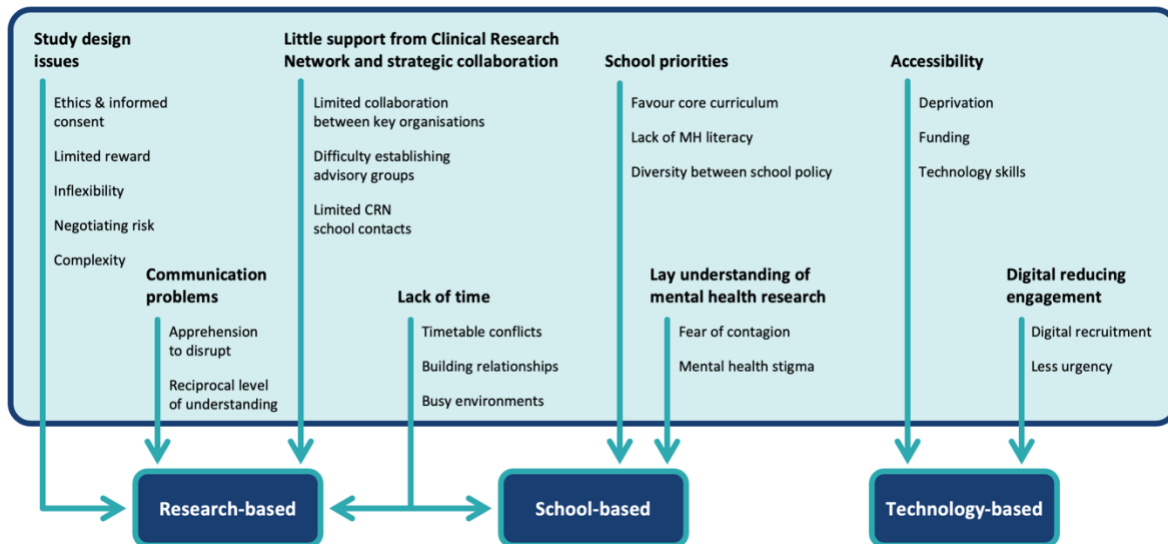


Figure 1: Challenges to delivery of school-based mental health research – major themes

1.2 Facilitating school-based mental health research

Facilitators for the delivery of school-based mental health research included:

- consultation and co-design
- research design compliments school environment
- effective communication
- collaboration
- incentives
- researcher characteristics
- schools as partners
- proactive school model
- straightforward data collection
- easier dissemination
- autonomy

Facilitators were also categorised as school-based, research-based or technology-based. Figure 2 presents each theme and its key points, related to the context from which it derives.

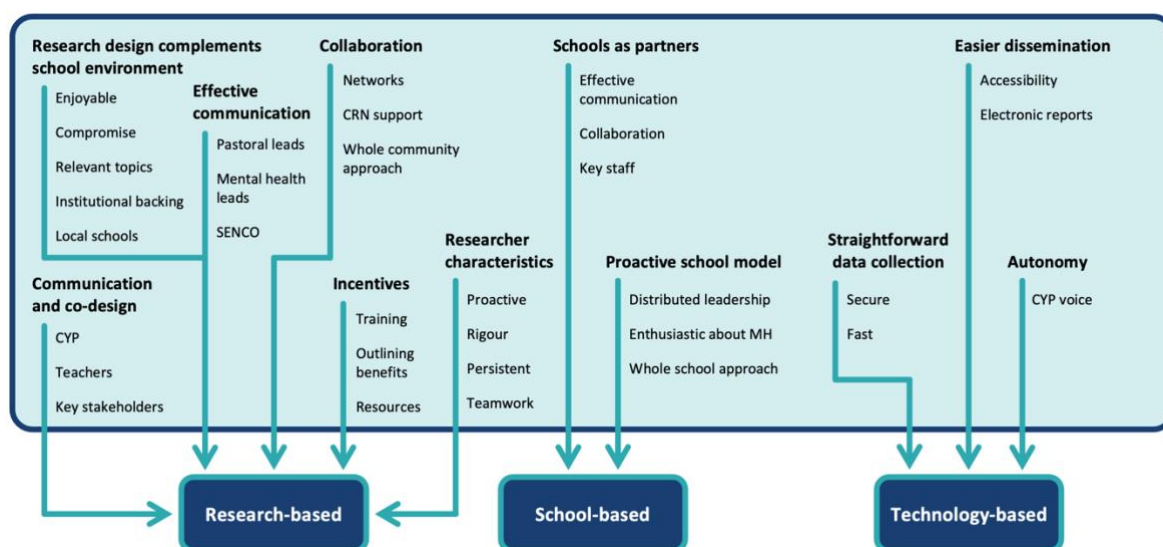


Figure 2: Facilitators related to delivery of school-based mental health research – major themes

1.3 Recommendations from Stakeholders

Based on extensive experience, Stakeholders gave recommendations for future practice related to school-based mental health research. Six categories of recommendations were identified.

1. **Challenging mental health stigma** – providing mental health education for school leaders and local authorities, using a systematic approach to enable active engagement with school-based mental health research from school leaders and local authority. This should also incorporate building mental health support into the structure of schools to establish good practice.
2. **Supporting a research culture in schools** – this could be done in four ways: 1) ensuring that for active projects researchers are present and accessible in schools; 2) incorporating more mental health education in professional training for teachers; 3) emphasising the importance of being involved in research linked to the national curriculum; and 4) senior schools leadership accessing and prioritising research opportunities.
3. **Study design** – designing research to better fit with the school environment. Engineering research designs to meet the needs of school communities, with fewer demands, being adaptable with methods or techniques, including digital research. Utilising qualitative data methodologies to capture powerful experience-based data. Considering what is feasible and devoting time early in the design process. Considering the various types of mental health and wellbeing issues in students and paying due consideration to safeguarding.
4. **Engagement** – devoting time early to recruitment, advertisement, and engagement. Engaging parents to improve pupil response, and have preliminary parental approval, to help schools feel more confident about taking part in research study. Showcasing results to schools to highlight the impact of research and supporting teachers and staff to facilitate best practice.
5. **Collaboration** – connecting with parents as collaborators, targeting active school-based stakeholder champions to improve access and engagement, and encouraging schools and researchers to work in networks across localities, to enable sharing of best practice and guidance.
6. **Funding** – offering financial support for schools for longitudinal research in terms of teacher buyout time or rewards to pupils. Developing transparent school-based funding networks, i.e., local authority wide school-based networks collaborating on applications for mental health support funding. Developing corporate partnerships for increasing research funding by businesses investing money in research projects.

1.4 Structure of report

The Background chapter (Chapter 2) provides a rationale for school-based mental health research and for this project. Chapter 3 covers the methodology of our data collection. The interviews with our Stakeholders comprised various topics, and Chapter 4 contains the more generic discussion around school mental health. It provides a backdrop to the key findings presented in Chapter 5. The main findings cover the challenges or complexities (5.1) and facilitators of (5.2) and recommendations by stakeholders (5.3) for delivering effective school-based mental health research (at any stage). The last two findings' sections describe the impact of the COVID-19 pandemic on mental health and mental health research in schools (5.4) and views regarding a new digital data collection platform ('Breathe Digital') designed for schools (5.5). A brief discussion follows in Chapter 6.

2 Background

“Our mental health and wellbeing are vital to our ability to thrive and achieve.” (1)

The mismatch between the trend of ever-increasing number of children and young people (CYP) suffering from mental health problems, and poor availability of appropriate resources, including mental health practitioners and staff to support and treat them, is of concern (1). The latest statistics show that one in six 6 to 19-year-olds have a probable mental disorder, yet only one in four of these receive specialist treatment (2, 3). Despite various efforts to reduce this treatment gap, the COVID-19 pandemic has worsened the situation, increasing rates of mental ill health in some age groups (especially 15 to 24-year-olds), exacerbated by socioeconomic circumstances, and considerably impacting access to care (4-6), and considerably impacting access to care. The long-term effects of the pandemic on youth mental health remain uncertain. The capacity of specialist mental health services is limited, yet many young people are also apprehensive of engaging with mental health professionals. Greater emphasis should therefore be on prevention and using alternative arenas to support CYP mental health. Schools and colleges have long been identified as potential settings for identifying CYP struggling with emotional or behavioural problems, and for implementing both universal and targeted interventions to improve mental health and wellbeing (7, 8). Schools have 190 days of contact a year with most CYP aged 4 to 16 in England, with additional access to parents and carers. This offers a unique opportunity for public mental health interventions.

2.1 Mental health and wellbeing interventions in schools

There is increasing international evidence that school-based interventions can improve mental health and wellbeing, prevent or change health risk behaviours associated with the development of mental health conditions (e.g., smoking, alcohol & drug use), and help prevent specific mental disorders (e.g., depression and anxiety), suicide, stigma and discrimination (9). Most recently, an Early Intervention Foundation systematic review of national and international studies examined the effectiveness of different types of school-based mental health interventions with universal social and emotional education alongside universal and targeted cognitive behavioural therapy interventions, showing greatest impact on CYP’s mental health (depression and anxiety) and wellbeing outcomes (10).

Interventions targeting wellbeing can boost resilience and help CYP cope better with stress (11), improve academic outcomes (12), and bring substantial improvement across the whole life span (13). Since mental wellbeing is correlated to educational attainment there is an opportunity to harness support from a wide range of stakeholders, including local authorities, policy makers and corporate investors, as well as parents and individual school leadership teams. Following the rise in academy status schools across the UK, Public Health England has also been encouraging schools to measure subjective wellbeing of CYP to help identify the mental wellbeing needs of students and determine how best to address these (13).

2.2 Problems associated with implementing interventions

To date, interventions in schools have not always produced positive results. For example, a review by the Early Intervention Foundation identified limited evidence on the effectiveness of interventions designed to prevent suicide and self-harm (10). Another systematic review focusing on interventions in England found the effectiveness of school-based universal mental health interventions delivered to all pupils to be neutral or small (14), although positive effects were found for poorer quality studies and those based in primary schools. A reliance on small samples, use of non-random study designs, wide variation in (non-validated) outcome measures, and the difficulty in generalisation to other contexts are some of the restrictions faced by school-based intervention studies (15). Further problems are incomplete implementation, restricted sustainability, and narrow spread, often associated with poor engagement of school staff and other individual, community, and system level barriers (15). Contributing factors may be inadequate background research associated with the identified problem and the development of the intervention, and lack of knowledge about the school as a setting for interventions. A review by Gee, et al. (2021) confirms that implementing mental health interventions within a school context presents many challenges (16). The most

frequently reported were associated with school timetables and the physical school environment. High-quality implementation that takes into account the school context and various individual, community and system level barriers is crucial to achieving fidelity and positive mental health and wellbeing outcomes (10, 15).

2.3 Effective interventions require research in schools

Developing effective mental health interventions usually involves an interdisciplinary approach, including researchers, school staff, students and other stakeholders, and a number of steps that are shared with any quality intervention development (17):

1. defining and understanding the problem and its causes
2. identifying which causal or contextual factors are modifiable: which have the greatest scope for change and who would benefit most
3. deciding on the mechanisms of change
4. clarifying how these will be delivered
5. testing and adapting the intervention
6. collecting sufficient evidence of effectiveness to proceed to a rigorous evaluation

A recent systematic review identified requirements for the successful implementation of indicated psychological interventions for emotional disorders in young people within schools and colleges as: 1) selection of an appropriate intervention; 2) consideration of logistical challenges of the school context; and 3) provision of training and supervision to enable staff to deliver interventions with fidelity (16). Theoretical models of implementation, such as the EPIS model (exploration, preparation, implementation, sustainability), are useful for identifying different implementation phases and aspects of the context that are significant at different phases (18). Evaluation studies should also include data on implementation (e.g., dosage and adherence of what was implemented), usability (e.g., acceptability and feasibility), and the quality of delivery, to determine what leads to the success or failure of interventions (10).

All the above steps and stages require research or data collection in schools. Intervention studies are usually preceded by exploratory and descriptive research, using qualitative and quantitative data collection techniques. The range of research activities include bespoke surveys or mental health/wellbeing screening (19), and qualitative interviews among students, for example, to better understand CYP's mental health, and the interplay between mental health and wellbeing and various phenomena (e.g., school non-attendance / attendance problems, social media, mental health literacy levels, primary-secondary school transitions, teachers); focus groups with students, parents and teachers to gain their input to intervention development and evaluation; and qualitative interviews with stakeholders to understand challenges and facilitators to implementation. Testing and evaluating interventions usually requires quantitative data collection at baseline and follow-up timepoints (e.g., surveys), and the facilitation of the intervention with the help of school staff. To maximise quality, educators, young people and families/parents should be actively involved in the research design and delivery process (16).

While several reviews and studies shed some light on the challenges regarding implementing interventions in schools (10, 15, 16, 20), little practical guidance is available on how best to engage and involve schools in mental health research and to deal with the various challenges linked to the different types of data collection in schools. Bartlett, et al.'s (2017) narrative review provides useful guidance, but it does not focus specifically on mental health research, nor is it UK specific (21).

3 Methodology

3.1 Aims and key research questions

The primary research questions that guided our data collection with Stakeholders were:

- What are the key challenges faced when conducting school-based mental health research?
- What facilitates the implementation of school-based mental health research?

3.2 Research setting and approach

The report forms part of the background to a collaborative project (*Breathe Education*) involving mental health experts from the NHS, academia and local government working with schools in the West Midlands to develop innovative digital solutions and strategies for the wellbeing of young people in the school context. The project was initially funded by the NIHR Clinical Research Network West Midlands (CRN WM).

We conducted a qualitative study engaging key Stakeholders in in-depth virtual one-to one semi-structured interviews, and an online event with virtual, nested focus groups. Significant adjustments were made to the original research design due to the COVID-19 pandemic restrictions, as our planned data collection coincided with the first lockdown and subsequent social distancing measures. For example, we were unable to recruit any school pupils, although this had been planned.

Interview topic-guides were developed for the various Stakeholders based on available literature linked to school-based mental health research, and in consultation with the research team (see *Appendix 1* for researcher topic guide). All Stakeholders were asked questions about their experiences of school-based mental health research, what they think facilitates school-based mental health research, and what they think are the key barriers hindering research activities. They were also asked about their areas of interest and any ideas on best practice for school-based mental health research.

We gained ethical approval for the study from the Biomedical and Scientific Research ethics committee (BSREC) at the University of Warwick (BSREC 115/19-20). All stakeholders provided informed consent prior to participation.

3.3 Stakeholders

Using a convenience sampling strategy, eligible Stakeholders were recruited between July 2020 and April 2021 on their response to generic recruitment emails generated by the research team. We contacted two Clinical Research Networks to gain their views regarding supporting research in schools, now part of their portfolio. Researchers were recruited from CLAHRC West Midlands (now ARC West Midlands), and from other ARCs across England, recommended by the research team. Children's charities known for school-based mental health research were also approached by the research team. Key school staff and stakeholders were identified through involvement in our linked project 'Breathe Education' and through links to Coventry Educational Psychology Service, who had an established working relationship with the research team. The COVID-19 pandemic hampered recruitment significantly. Our total sample was 17 for the one-to-one interviews, with one Stakeholder from the charity sector being interviewed twice, the second time together with a colleague (Table 1). A further ARC researcher contributed via written feedback

Table 1: Stakeholders involved and their identifiers

Sector	Number of stakeholders	Identifier
Clinical Research Network (CRN) – two locations	2	SH10, SH11
CLAHRC/ARC	10	SH1, SH2, SH3, SH4, SH5, SH6, SH7, SH8, SH14, SH18
Charity sector	2	SH15a, SH15b, SH17
School teacher – primary & secondary	2	SH9 (secondary), SH16 (primary)
Chair of governors	1	SH12
Educational psychology services	1	SH13
TOTAL	18	18

In addition to this, a virtual workshop was held during the annual *National Cross-ARC, Mental Health in Schools Special Interest Group* meeting in April 2021, including focus groups regarding school mental health research experiences. The three focus groups involved 23 Stakeholders, including two moderators in each group. Feedback from this event informed the report by addressing any gaps in the existing material identified by the research team.

Former CLAHRC (now ARC) West Midlands researchers had over ten years of experience of conducting primary and/or secondary school-based mental health research within West Midlands. Other ARC researchers had also significant experience of carrying out research across the country. Members from the charity sector had experience of conducting research in the West Midlands and the whole of Wales.

3.4 Data Collection and analysis

Most data collection occurred via virtual interviews using Microsoft Teams (n=17) after informed consent had been obtained via email. Responses were transcribed by an independent transcription service for most (n=16), and summarised in bullet points by a researcher for some (n=2). Summaries were used when audio-recording was not possible; the recording function on Microsoft Teams did not work (n=1), or a telephone interview was required (n=1). Summaries were provided for the focus group discussions, and one ARC researcher contributed via a written summary of research work and experience.

Taking a pragmatic approach, using thematic analysis the data was organised by one researcher (MD) using a top-down approach, initially six meta-themes were identified. Twenty percent of the transcripts were independently analysed by a second researcher (HT), themes and codes were then cross-checked between researchers.

4 General feedback

As part of the interview process Stakeholders gave insight into the current mental health environment in schools, providing useful context and background information. We will therefore focus here on the sub-themes of 'mental health needs within schools', 'school culture', and 'current strategies'. We have supplemented these three sections with information from the literature, to illustrate the points further.

4.1 Mental health needs within schools

Mental health needs of pupils in schools are wide ranging from wellbeing support to support for severe and complex mental health problems. Stakeholder SH9 (Secondary school teacher and mental health lead) elaborated the situation in their school:

"I can speak for our school but, you know, there is a mental health crisis. We have got, you know, we've got children not going to school. School refusers, not loads, but, you know, they're people's lives and...and, you know, the queue at CAMHS is months and months (...)"

According to SH9, students' anger and problems impacted not only the students but also teachers' mental health and wellbeing. This was corroborated by other Stakeholders.

"the importance of...of recognising the role of teachers' mental health in all of this and how teachers' mental health, poor mental health leads to greater difficulties in...in being able to have capacity to support students mental well-being" (SH3 – ARC researcher)

Stakeholders generally felt that it was important to ensure mental health and wellbeing support, and training is accessible for teachers and other school staff to equip them with a level of resilience and confidence to be able to provide more effective support to pupils.

Stakeholders recognised the importance of early intervention, e.g., an educational program or intervention that supports mental health or wellbeing, and is promotional or preventative in nature (10).

"I think that support is only ever put in place when you are at that bad point. And I feel so strongly about that, that actually preventative measures are what's needed. (...) at this level, (..) we need to talk about wellbeing, and not just, they've got anxiety, depression or they're struggling with bereavement for example. We need to focus on their general wellbeing and helping them to prevent them from developing poor mental health, or having mental health conditions when they're older by trying to put those preventative measures in place. And teaching children how to cope with those feelings and those strong emotions. Yeah, I feel very strongly about that."
(SH16 – Primary school teacher & mental health lead)

Early intervention is recognised in school communities as beneficial for reducing the impact, or preventing the development, of mental ill-health (22). Targeting all pupils with strategies to improve their wellbeing, manage their emotions, and improve understanding of how mental health functions as part of their educational experience, can enable them to practice positive wellbeing strategies. Teaching mental health literacy during school time is seen as an ideal way for individuals to retain this information and apply it throughout their lifespan. Early intervention is also more cost-effective; treating already established mental health problems is thought of as more difficult, usually requiring access to clinical services. A secondary school teacher emphasised the importance of developing school-based solutions to support young people with emerging problems:

*"the queue at CAMHS is months and months (...) And it's almost like you can see it happening and there's nothing you can do about it because you make the referrals and there's a queue. They have that...they have that bit of counselling and then it's not enough 'cause it needs more. So, by the time they've had the intervention, it's spiralled and... Yeah. And you've got somebody not going to school. Yeah. And it...and it feels frustrating (...) it's sad because **you can see early signs and if you had the right intervention and the right money and the right investment with***

time, people's lives could be changed.” (SH9 – Secondary school teacher & mental health lead, emphasis added)

However, frontline Stakeholders (teachers, chair of governors and charity workers) felt that early intervention is not established enough in policy, making it a school-by-school decision as to what interventions are delivered.

4.2 School culture

School culture refers to the shared beliefs, attitudes, values and norms within a school, as well as the relationships between school staff, students and families (23, 24). The priorities and goals of the head teacher and senior leadership team often influence key decisions regarding priorities, agenda and policies.

Stakeholders spoke about the disparity in the school culture of primary and secondary schools (25).

“but the relationship of secondary school teachers to the family is very different, is very different, it’s not a whole child approach at all.” (SH15b & SH17 – Charity sector researchers)

Primary schools are normally smaller than secondary schools and may have a more personalised culture; secondary schools are usually larger and tend to be more authoritarian, with a greater focus on academic achievement. Pupils transitioning between years 6 and 7 can feel a significant gap in emotional support once they begin secondary school (26).

The national curriculum is prioritised in all state schools; attainment continues to be the principal indicator of success for any school and core subject teaching is often prioritised over mental health and wellbeing education. However, many schools are keen to support the mental health and wellbeing of the pupils, and are becoming more aware of the importance of doing so. With a curriculum that historically focusses on academia and attainment, many schools have found this a challenge. For example, through PSHE, relationships and wellbeing are supported but they are nuanced in relation to school curricula.

“It can be anything PSHE-related, that I do. So, for example, this half term, I’m taking lead on sex education for children. And I think that it doesn’t always have as much importance in the curriculum as, say, English and maths does, which is very difficult because, me, I’m very passionate about it. So, for me, it does have that importance, but I don’t necessarily feel that that’s always viewed by everybody. And therefore, when you do try and introduce things such as mental health, I’m not sure it’s given as much of a priority as other subjects.” (SH16 Primary teacher & mental health lead)

Recent government policy in the UK has encouraged a whole school approach to develop a positive school culture and ethos, which nurtures the sense of belonging and positive emotional wellbeing (1). Public Health England has described this as involving eight principles, which include, among others: student voice, working with parents, and staff development, underpinned by leadership which champions emotional health and wellbeing (27). By adopting a whole school approach, it is anticipated that every member of the school community feels responsible for success and feels valued (27). Stakeholders pointed out that schools with a whole school approach and an understanding of the link between mental health and achievement are more likely to have a cohort of pupils more prepared to discuss mental health and wellbeing.

In all schools, key members of staff take responsibility for mental health and wellbeing: these are usually designated safeguarding leads, mental health leads or special educational needs coordinators (SENCO). More recently, designated school wellbeing leads, or Senior Mental Health Leads (SMHL), are being appointed in England following government recommendations to transform mental health service provision for children and young people (28). The role of SMHLs is to support the establishment of a holistic approach to mental health and wellbeing, and a positive mental health ethos in their school/college setting. In all schools key staff linked to mental health and wellbeing, and senior leadership, together with school governors, are responsible for mental health and wellbeing strategies, and developing action plans that reflect the needs of the pupil population, research, and government white papers, and/or curriculum guidance. It is typical for primary and secondary schools to have a pastoral team available to all pupils, and secondary schools may

have, in addition, counselling services in place. In primary schools, pastoral teams usually provide support, advice and information to families within the school community.

4.3 Current strategies in schools

Strategies employed in schools to support CYP with mental health and wellbeing can be split into two distinct models: universal and targeted. Universal strategies refer to whole-class or whole school initiatives designed to enhance wellbeing and reduce the likelihood of developing mental health and wellbeing problems (29). Universal models include monitoring and surveying of mental wellbeing (14, 19, 29). Targeted strategies refer to initiatives aimed at individual CYP most likely to develop, or already exhibiting, mild or moderate mental health problems (10, 30). Offering a menu of strategies helps ensure that CYP mental health needs are met.

Current strategies listed by Stakeholders that support pupils' mental health and wellbeing, included the 'Daily Mile' (<https://thedailymile.co.uk/>), daily yoga (exercise-based initiatives), and guided meditation (a mindfulness-based initiative). These are examples of universal prevention strategies in primary schools, with teachers leading on the implementation. The 'Bouncing Back' programme (<https://tredegarschool.cymru/News/Bouncing-Back-building-resilience-in-our-young-peo/>) and 'The Guide' (31) are further examples of universal strategies devised by Action for Children aimed at promoting wellbeing and mental health literacy, delivered first to teachers and then via trained teachers to full cohorts of pupils in secondary schools in Wales. Stakeholders listed other projects involving teacher training to support early identification of students in distress, talk with them and link students to support.

When considering targeted strategies for children and young people, it is common practice for mental health leads or SENCOs to organise and support the delivery of some basic interventions to those pupils needing targeted support, but there is variation across schools. As described by one of our Stakeholders, in Coventry key school staff in both primary and secondary schools will often use a referral process utilising educational psychology services for support. Educational psychology services use a consultation model for treatment-based interventions; collaborating with the child/young person, teachers, and parents to develop an intervention that compliments the needs of the child/young person. Post-lockdown, when pupils returned to school, educational psychology services carried out pupil wellbeing surveys and behaviour checklists with whole classes to assess potential support gaps.

Action for Children offers a targeted intervention package to secondary schools referred to as the 'Blues Programme' (<https://actionforchildren.org.uk/our-work-and-impact/children-and-families/good-mental-health/blues-programme/>), which adopts a cognitive behavioural therapy model and is targeted at CYP already struggling with their mental health, experiencing depressive symptoms. It now has Early Intervention Foundation level 4+ accreditation, which is granted to programmes with evidence of a long-term positive impact through multiple rigorous evaluations ([Blues Programme | EIF Guidebook](#)).

The latest development in schools is the implementation of Mental Health Support Teams (MHST) (1). Stakeholders did not mention the MHSTs specifically, but this may reflect the fact that the implementation of MHSTs was initially restricted to a limited number of trailblazer sites. The role of MHSTs is to work with schools/colleges to provide direct support to CYP with mild to moderate mental health problems; support schools/colleges to introduce or develop their whole school or college approach to mental health and wellbeing; and provide advice to staff and liaise with external specialist services to help CYP to get the right support and stay in education (32).

4.4 Benefits of school-based research

Stakeholders recognised that school-based mental health research has a range of benefits: Apart from supporting the development of interventions, it can inform relevant policy development in schools, develop teachers' understanding of mental health and wellbeing, and support the development tangible solutions to help students with mental health needs. An educational psychologist thought that school-based mental health research can complement educational psychology objectives to deliver research, e.g., on the topics of wellbeing and flourishing.

Researchers emphasised the benefits of background research in schools and the cyclical nature of research, beginning from the development of research tools for assessments and surveys that facilitate the development of an evidence base to inform further research designs, including the development and testing of interventions.

“So, I think it’s looking at design interventions now, so using the evidence that we’ve got from perhaps amongst (...) studies, so then we’ve designed some interventions and starting to do feasibility studies, test them out.” (SH14 – ARC researcher)

A variation of school-based mental health research is engaging schools as ‘partners’ in research, promoting, engaging and encouraging participation in intervention studies not implemented within the school environment but which the school believes to be important, meaningful and beneficial to them and their community. The prerequisites are the same as for research happening within schools. A solid foundation of trust is needed between schools, families and young people, including effective communication channels, for the promotion and engagement of families through schools for externally implemented intervention.

Stakeholder SH18 (ARC researcher) provided an example of a project using this approach: a trial of an online digital resource to support parents/carers of young people with depression and anxiety has utilised schools in the UK as ‘conduits’ to recruit parents/carers of young people experiencing depression and anxiety. The ongoing trial is delivered completely online, accessible to participants via mobile phone, laptop or tablet and able to be completed by parents/carers in their own time.

5 Key findings

5.1 Challenges of school-based mental health research

Researchers can face various obstacles in the process of initiating and carrying out the various stages of research in schools, or when engaging them to take part in interventions delivered externally. Challenges can have a negative impact on, for example, recruitment of students and/or data collection.

Within the meta-theme of challenges eight sub-themes emerged: study design issues; communication problems; time; little support from CRN and strategic collaboration; lay understanding of mental health; school priorities; accessibility; and digital reducing engagement. These sub-themes were categorised under research-based, school-based and technology-based challenges (Figure 1).

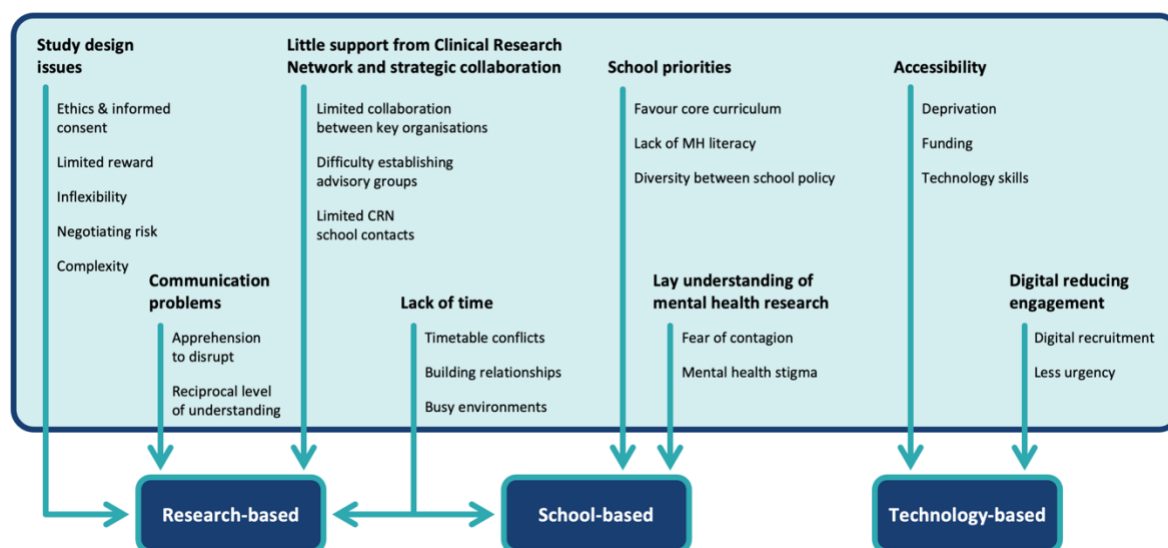


Figure 1: Challenges to delivery of school-based mental health research – major themes

5.1.1 Research-based challenges

5.1.1.1 Study design issues

School-based mental health research studies usually follow certain steps and procedures, like any other research. Stakeholders discussed study design issues in reference to the following research processes: ethical approvals, data collection, data protection, recruitment and participation, site retention, and safeguarding. The challenges discussed in association with these core study design processes covered five characteristics:

- 1) The **inflexibility** of study designs and procedures make them less appealing to busy school environments that prioritise core curriculum, and where day to day practices differ greatly between schools. Schools need a level of compromise to make study designs and research procedures fit their environment.
- 2) The **complexity** of language used in study information sheets and other study documents, and the length of these documents and certain research procedures – e.g., consent and data collection, makes participation less appealing for schools.
- 3) **Limited rewards** or benefits seen by schools compared to the level of contributions from staff and pupils required for participating.
- 4) **Negotiating risk** in terms of both data protection, and safeguarding children and young people can outweigh the benefit of participation; and related to this,
- 5) Research **ethics and informed consent**, especially in relation to gaining parental consent.

"(...) it was mainly an ethical barrier to recruiting young people, so because we still need a parental consent because we were asking some sensitive questions in the survey and the focus groups, parents were given consent and then the idea was that they send the survey onto their child or son/daughter, and we got lots of parents sign up but then the translation over to the young people didn't really materialise." (SH14 – ARC researcher)

Regarding recruitment and consent, parents must consent on behalf of children under the age of 13 and Stakeholders recognised that data protection issues cause anxiety and may deter participation.

"I think people are very nervous generally. You know and again, we're on a different era now with all of the data probably being provided online rather than face to face. And people just don't know where the data goes. And I think the GDPR, people still don't understand it. And it's very complicated to read about, isn't it?" (SH6 – CRN representative)

Careful thought needs to also go into the method or tools of data collection, as poorly designed or too lengthy questionnaires can jeopardise data collection.

"I mean, we had it down, that you could probably get through this [mental health] questionnaire in about 40 minutes. 40 minutes is too long, in my...40 minutes doing a questionnaire is a long time." (SH1 – ARC researcher)

The sensitive nature of mental health poses challenges regarding data collection in the classroom. If answers cannot be kept confidential students might be unwilling to respond to questionnaires (truthfully):

"One of our concerns that we had was that when we're in the class, the teachers are there too and the teachers can be quite influential or look over pupils' shoulders and things." (SH5 – ARC researcher)

5.1.1.2 Communication problems

Stakeholders emphasised communication problems linked to the difficulties faced by researchers in engaging with schools on a reciprocal level of understanding, due to 'not speaking the same language':

"this is one thing that is always highlighted by schools, by school leaders and heads. They get incredibly frustrated, not just by academics but by NHS and...and others, that we don't speak the same language. That...that sounds like a very, you know, odd statement, but... There is a very different way of...of engaging with schools, in their language..." (SH3 – ARC researcher)

Every sector speaks its own language and the jargon used in the education sector can take a while to learn.

In addition to this, it was highlighted that there is a general apprehension in relation to the potential to cause disruption in schools or build unconstructive relationships with schools, education authorities and other key stakeholders. The apprehension stems from the need for positive engagement.

"... annoying people is definitely my worst fear because you then you know it's down to individuals. And if you annoy them, you're not going to get anywhere which means you're not going to offer research opportunities to the many pupils, the teachers, the parents so it is around that relationship management is absolutely key ..." (SH6 – CRN representative)

5.1.1.3 Lack of time

Lack of time was referred to several times and was a research-based and school-based challenge. Researchers felt that additional time needs to be invested for engaging schools and building good quality relationships, when compared to conducting research in other environments.

"I'm now going to measure your mental health and wellbeing, it opens the doors for a lot of issues in terms of both trust but also, well, what's gonna happen with this data? Why are you doing this to my child? So, I think...I think, generally, the researchers that I know do a really good job at engaging with schools (...) versus, you know, dropping in and saying, hey, can I measure mental health of all your kids? It's definitely something that requires time and resources, as we

talked about, and maybe that's sometimes underestimated by funders or schools themselves.”
(SH8 – ARC researcher)

In addition, school timetable conflicts and time of academic year can also impact the ability to collect data successfully. Educators and researchers alike found that delivering the curriculum leaves little time to focus on school-based mental health research.

“...I then got in touch with schools directly, but it's very hard to get appointments and sometime I was struggling with meeting people, getting the right time to fit in with their schedules, and if one person was there, maybe I wanted the pastoral lead to be there as well. It was hard to juggle diaries in that sense, but you know, we did it in the end.” (SH4 – ARC researcher)

5.1.1.4 Little support from CRN and strategic collaboration

The NIHR Clinical Research Network (CRN) supports patients, the public and health and care organisations across England to participate in research projects (<https://nihr.ac.uk/explore-nihr/support/clinical-research-network.htm>). Traditionally the research supported by CRN has taken place in clinical settings. Stakeholders representing the CRN pointed out the CRN is branching out to include school-based (mental) health research, however there is limited awareness of the support available from CRN, and/or the studies have not been eligible for NIHR support (i.e., they have been early-stage studies exploring opportunities), and currently there is little infrastructure available to support schools in the same way as NHS-based research. As an example, there is no research passport scheme like in the clinical setting, which allows checks to be done on individuals doing research in the setting. Furthermore, CRN do not yet have contacts in the school setting like in acute and primary care settings, who might be interested in and help set up studies. This has been a reflection of the lack of available portfolio in these settings: as activity grows the CRN is developing strategic links with Local Authority and Academic schools.

“But as a network, we don't have much mental health research in schools on the NIHR portfolio at all really. (...) we're starting to make progress in non-NHS settings, but we're...certainly, we've got loads of, you know, we've got lots to learn and lots of progress to make within those settings.” (SH10 – CRN representative)

Little strategic involvement between organisations was also identified as hindering progress: similar research designs were being delivered by different teams and focusing on different outcomes; these could be amalgamated as one collaborative project. Organisational changes were also viewed as hindering collaborative research as staff move on or change their research focus.

Many studies benefit from an advisory group involving school staff. However, Stakeholders reported difficulties establishing advisory groups of teachers due to the relaxed nature of advisory roles in comparison to the demands of teaching roles.

“when you're in an advisory role, I think no matter how much I try to be engaging, an advisory role will always be less intensive and less involved than actually being involved in a study.” (SH8 – ARC researcher)

5.1.2 School-based challenges

5.1.2.1 School priorities

There is diversity between schools across the UK with different local education authorities having responsibility for policy level decisions within different localities, and the rise of academy-funded schools. Varying local authority governance has led to systemic differences in local mental health agendas and how these are prioritised within schools.

It was observed that school priorities are not always conducive to research. Stakeholders thought that mental health strategy is only recently becoming a more significant part of the agenda, with schools prioritising education. The school culture generally prioritises the core curriculum over mental health education, this is especially the case in secondary schools.

“...barriers with the day-to-day teachers around ‘they’re not going out of My Lesson because they need to do maths’.” (SH15b & SH17 – Charity sector researchers)

With multiple priorities, teachers are often unable to divert attention to areas that are not part of the core school activities.

“(...) and of course they're not, they're just incredibly overworked and as...as exhausted and, and being asked to all sorts of things and trying to keep families happy and obey and...and work with very damaged young people as well as very gifted young people...” (SH3 – ARC researcher)

If teachers do not feel supported, asking teachers to take on extra tasks in relation to a research study may jeopardise *their* mental health (FG2). However, part of the problem may also be teachers’ lack of mental health literacy and exposure to research:

“(...) if we don't start off when we train teachers, supporting them to understand around mental health but also supporting them to understand being part of the research, nothing's going to change.” (SH15b & SH17 – Charity sector researchers)

5.1.2.2 Lay understanding of mental health research

A limited or ‘lay’ understanding of mental health research can affect participation negatively. It was widely reported by Stakeholders that parents felt concerned about researching mental health with their child, and parents had the impression that there may be something wrong with their child, or a mental health problem may be unearthed or triggered if the child participated in mental health research.

“the idea about some people coming into school and investigating your child's level of depression or self harm, is going to be quite anxiety inducing for them. And again, it's how do you go out then and communicate with parents... How do you ensure that you're not alarming them, and building trust in the activities that you're doing?” (SH2 – ARC researcher)

A difficulty in understanding often complex research practices such as interventions, recruitment or consent procedures exacerbated this wariness of mental health research.

In addition to this, it was felt that school staff can be mistrusting of mental health research, generated by a fear that it may encourage or intensify mental health problems within their cohort of pupils.

“I think there was a bit of, a bit of concern about, you know, the more you talk about it, the more contagion you, you know, all that stuff about suicide contagion, you know, of clustering's of suicides, and...you know, there was a lot of concern that there will be clustering's of mental health difficulties, and that might put the schools in a bad light. So yeah, there was definitely a bit of pushback occasionally on those fronts...” (SH2 – ARC researcher)

5.1.3 Technology-based challenges

Technology was identified as a challenge and was discussed in relation to *accessibility* and *digital reducing engagement*. When research requires technology, those in more deprived areas are less likely to have access to technology and be less confident using technology.

5.1.3.1 Accessibility

Research relying on technology impacts accessibility to research. Including deprived areas in research can become a challenge:

“...the school I just spoke about was in a deprived area and that is why we offered the flexibility of coming in and supporting them in person. So, I think that is key, you'll find, you know, hard to reach population, the schools that don't have these gadgets, are not able to... And I think that's where the research really needs to improve in because I think we can reach people who do have these types of, you know, technology, but the ones that are in socially deprived areas always tend to miss out on things like this.” (SH4 – ARC researcher)

Stakeholders explained that providing technology to schools requires additional (research) funding for the supply. This may not be more difficult to access but for researchers looking to secure a research grant or working to a pre-determined budget, keeping research costs to a minimum may be perceived as having a favourable outcome.

In addition, the skill set of teachers and pupils needs to be at a level to comprehend any technological demands of research, yet schools have traditionally been viewed by researchers as paper-based institutes.

5.1.3.2 Digital reducing engagement

When considering participant engagement, digital research is not always as effective when compared to paper-based research; the need to complete a digital survey (at home) is less urgent and may not be prioritised when participants become distracted by tasks viewed as more important. Furthermore, instructions can be misinterpreted or forgotten.

“(...) and definitely recruiting kind of digitally, we have struggled and I think it’s, people generally have good intentions but then go off that side, get distracted. (...) So even though you’re reaching more people.” (SH6 – CRN representative)

Furthermore, when all learning is digital, as during the COVID-19 lockdown, digital data collection methods and interventions become less attractive for students (FG2).

5.2 Facilitators enabling school-based mental health research

Facilitators describe any practices or processes that enable school-based mental health research. Within the meta-theme of facilitators eleven sub-themes emerged: *research designs that compliment school environment, consultation, effective communication, collaboration, incentives, researcher characteristics, schools as partners, proactive school model, straightforward data collection, easier dissemination, and autonomy* (Figure 2).

These sub-themes were categorised under research-based, school-based and technology-based facilitators.

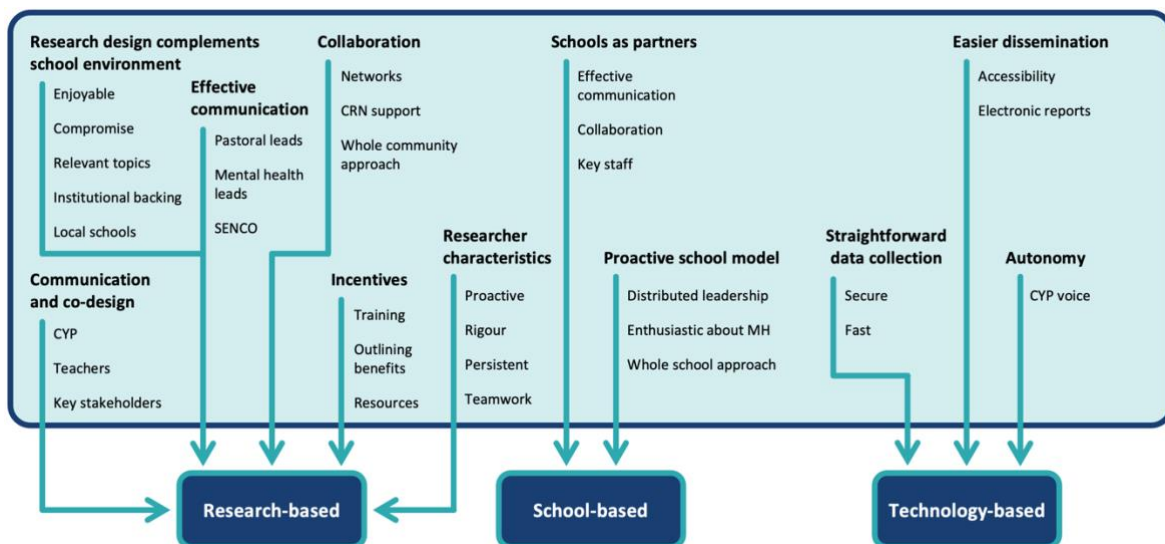


Figure 2: Facilitators related to delivery of school-based mental health research – major themes

5.2.1 Research-based facilitators

5.2.1.1 Consultation and co-design

Consultation with schools early on in the design process helps researchers gain an understanding of the school environment, and ensures that the research design and data collection reflects the school environment, practices and culture:

“first of all we co-constructed the research design and the data collection techniques with young people, so to understand how they were using social media and wanted to do lesson activities with them” (SH14 – ARC researcher)

Having schools (teachers and pupils) involved in co-designing the study can ensure that it is relevant to their needs.

Notably the classroom environment can differ from the whole school environment or culture (FG2), so exploring these in more detail can be beneficial to understand the dynamics within schools.

Consultation can involve teachers, children and young people, and other key stakeholders, such as educational psychology services, local educational authority, local government and commissioners. When using a consultation model, it is important to target active stakeholders, i.e., professionals with a vested interest in school-based mental health research and improving children and young people’s mental health.

“(…) firstly, talking to school staff to get their advice and help on developing those strategies. So, the big project that I’m working on, we have a couple of members of school staff on the, kind of, study management group. So, they’ve helped us develop that.” (SH 7 – ARC researcher)

Teachers and pupils can also help co-design participant information sheets and consent forms to reduce the jargon and ensure they are legible for the target audience

5.2.1.2 Research design that compliments school environment

Research design that complements school environment is observed as important for facilitating school-based mental health research. Without using a design that fits in with a school environment or culture, the study is unlikely to be successful. When recruiting schools, important aspects to consider include: how the research can be enjoyable for participants; ways to compromise to fit individual school priorities; choosing local schools; ensuring that research targets urgent or relevant issues for school; and having the backing from the governing body and a recognisable institution such as a university or charity. All of these were highlighted as important for facilitating recruitment of schools.

“(…) schools that have permitted the chance you know they can see that the research has some benefit for them or the parents or the children. And therefore, they’ve been willing to work with us to set that up and move to it. (...) It really is understanding what’s in it for them, how does it help their priorities, et cetera.” (SH6 – CRN representative)

Schools may be more willing to engage when interventions are part of the study, especially if it provides an opportunity for upskilling teachers to deliver the intervention (FG2). Schools in the control arm may be happier to engage if they are offered a different intervention rather than ‘usual care’ (FG2).

Research procedures are also important to consider, and informed consent was seen as a complex procedure to navigate when gaining consent for children and young people to participate in research. Building consent into a lesson and giving pupils the option to give consent as well as parents leads to successful engagement. Giving responsibility to children and young people to consent to participate allows them to understand research and make an informed choice.

“I think the pupils take it really seriously, I’ve had some quite interesting discussions with the young people about what assent means and what it means to take part and what it means to make their own choice. And the vast majority, 95% of these kids I think take it really seriously and really almost like to choose themselves, if that makes sense.” (SH14 – ARC researcher)

Using *in loco parentis* can help with recruitment and attrition, but it severely limits what data can be collected. *In loco parentis* refers to where the data collection activity is being conducted in schools with the permission of teachers or headteachers, for the purpose of safeguarding or promoting the child's welfare. This can be done in association with passive consent or 'opt-out' consent, which allows parents to state their disagreement with their child's research participation through an opt-out form. If they do not complete it, consent is presumed, and the child can be enrolled in the research if the child wishes.

In loco parentis has been used in the past by researchers, however, research ethics committees will now scrutinise carefully any plans for utilising this approach, and are more likely to recommend active consent, or opt-in consent, which requires parents to state their agreement with child's research participation. The requirement of active consent usually reduces the number of CYP taking part in studies, due to difficulties associated with getting parents to sign a parental consent form. However, reduced numbers of participants per school can be countered by working with a network of schools, rather than just a single school.

5.2.1.3 *Effective communication*

Effective communication and collaboration refer to how researchers engage with schools and key stakeholders in a way that will encourage meaningful participation in school-based mental health research. Effective communication requires the identification of key school staff; individuals who can enable school-based mental health research and take responsibility for coordinating research within the school. This includes pastoral leads, mental health leads and special educational needs coordinators. Effective communication also includes choosing the most appropriate means of communication for the task at hand:

"So, if you can find that right person and pin them down, and maybe do it either on the phone or face to face, then you're able to just get across what you're trying to do a little bit easier than you do in an e-mail perhaps, which I know isn't as easy." (SG16 – Primary school teacher & mental health lead)

Building strong working relationships with key school staff is an important aspect of effective communication. Beneficial avenues are targeting staff meetings and having a good knowledge of a school to be able to establish a relationship and regular contact with that school:

"we do what I call the hairdresser list where they found everything they can about the school. So, what is the receptionist called, what's her pet called, what's the school motto, all those kinds of things, so we really know so that we can really engage with the schools and show that we actually know what's going on. And so, we have very few frosty relationships, if I'm honest, and when we have, we've just been really honest with them." (SH5 – ARC researcher)

Effective communication also makes most of existing connections with schools:

"(...) particularly it's relying on relationships and we used informal relationships to kind of get in the door." (SH6 – CRN representative)

5.2.1.4 *Collaboration*

Collaboration was highlighted as an important aspect of facilitating school-based mental health research. Key stakeholders, much like research communities, often work within small networks sharing expertise and opportunities through special interest groups. There is an opportunity to improve school-based mental health research by establishing collaborative networks between key stakeholders and researchers. A collaborative approach allows stakeholder and researcher networks to improve accessibility to research. Establishing collaborative networks encourages cohesive working in school-based mental health research; laying the foundations for good working relationships when delivering projects. For example, educational psychologists working within local authorities support schools to improve CYP's experiences of learning. Research teams may benefit from working with them to gain access to schools (FG2). Local Authorities and commissioners can help drive research linked with monitoring mental wellbeing (FG2).

Collaboration was also seen as facilitating greater impact of school-based mental health interventions. For example, a whole community approach can facilitate wellbeing interventions within schools. This strategy has been utilised by SH15 and SH17, who have recruited influential community organisations such as local

sports teams to extend interventions implemented in schools (e.g., on mental health literacy and wellbeing interventions), thus embedding interventions into children and young people's whole community:

"Within the community work, we're realising, especially around the whole school approach, that the more we educate our communities the more the schools in the communities feels safe to engage with the bigger picture, so the whole school approach shouldn't be ending up at school gates, the whole school approach really needs to be community as well. So, the work we're doing especially with working with [name of rugby club] in the community, which is their community outreach team. [Rugby club name] is their professional rugby club" (SH15b & SH17 – Charity sector researchers)

Community groups are often more willing to take part in research than schools so should not be neglected (FG1).

Collaborating with CRN can help research teams of 'portfolio studies' (eligible for support from CRN), but roles and responsibilities in relation to study activities must be considered carefully so as not to create confusion:

"(...) our role was then to not recruit, to not go into the school but to support by phoning people then the parents. So, yeah, I think one of the challenges is just understanding from working with the study teams how can we add value as an organisation because obviously, we don't want to go in be another face, another new person for schools to get to know." (SH6 – CRN representative)

5.2.1.5 Incentives

Incentives were talked about as the responsibility of the research team. Monetary incentives were not often seen as useful in school-based mental health research. Instead, incentives that were based on exchange of services were favoured. This included mental health training for staff, careers events for pupils, and access to mental health support resources. As well as offering services, outlining the direct benefits of taking part were seen as incentives and increased engagement. This included explaining the evidence-base and the link between mental health outcomes and attainment. To be able to access the results was also a benefit of taking part in research.

"...so that they don't just feel they're giving up their time and energy and, kind of, nothing is directly in it for them. So always share a report with the school and have a conversation early on with schools about what format that report might be most helpful for them." (SH7 – ARC researcher)

Regarding intervention studies, more consideration should be given as to how to reward schools or groups who are in the control arm of a cluster randomised controlled trial to ensure their engagement (FG2). They may be happier to engage if they are offered a different intervention rather than 'usual care' (with implications for study design) or if they are rewarded properly for taking part in the study (FG2).

Stakeholders also pointed out that careful consideration should be given to intervention studies relying on teacher input, as these studies may have an impact on teachers' mental health through extra workload.

5.2.1.6 Researcher characteristics

Four distinct characteristics of what makes a good researcher were described by Stakeholders. This included rigorous, persistent, team player and proactive. Rigorous researchers cover all aspects of the research project and are immersed in the process ensuring it runs smoothly, this often refers to a team of researchers, as it is a time-consuming process and requires more than one person to coordinate. Team players enable succinct coordination of the study design. Persistence is important with school-based mental health research to be able to facilitate adequate participation from schools, keeping communication lines open and building strong working relationships. Proactive researchers engage with the study design in a timely manner and keep the momentum going during data collection, analysis and through to publication. This can ensure research is relevant and in time with publication trends:

“it definitely needs a pedal to the metal to, you know, to achieve, you know, to get all that published and to move it forward...” (SH3 – ARC researcher)

5.2.2 School-based facilitators

Schools that are open to being involved in research were viewed as more likely to facilitate school-based mental health research.

5.2.2.1 Schools as partners

Schools as partners considers *effective communication* and *collaboration* from the school’s perspective. Stakeholders discussed schools being able to engage in a reciprocal relationship with researchers; having key staff who want to be involved in school-based mental health research for the benefit of the school and in some cases the wider mental health agenda. In addition to this, it was felt that schools who have good relationships with parents enable easier recruitment and have strong internal communication, as described below:

“Meeting between governors and senior school staff every fortnight and a report is generated by the school which shares everything that is happening across the schools. Keeps everyone in the loop and working from the same page.” (SH12 – Chair of governors)

A partnership approach is needed when utilising schools as ‘conduits’ for recruitment of families into external studies. Success is heavily reliant on the strength of relationship the schools have with their families. The strength of these relationships is vital in establishing trust and engagement to support recruitment into externally implemented interventions.

“Whilst many partner schools on the trial have well-established positive relationships with their families, it is an ongoing challenge for others to communicate with and engage with their families, particularly with regard to school initiatives. This has meant that recruitment of families into the trial has varied immensely, despite schools using multi-pronged communication strategies in an attempt to engage with those who are hard to reach.” (SH18 – ARC researcher)

The COVID-19 pandemic increased difficulties for the trial, yet the research team have been successful in engaging over 50 schools as partners in the research project. SH18 explains how:

“Much of this success has been due to the ongoing communication between the research team and school staff. The research team regularly meet (online) with partner schools, advising and supporting them in improving their engagement with families, including the offer of online parent/carer meetings regarding the trial and educational sessions on the importance of youth mental health. And this, we believe, is key to successfully utilising schools as ‘conduits’ for recruitment. If schools are to be involved with research in this capacity it is vital they continue to feel included, involved and supported by the research team, particularly in terms of building trust with their families which may have long-lasting benefits for them.” (SH18 – ARC researcher)

5.2.2.2 Proactive school model

Proactive school model refers to the types of school environment or school cultures that can facilitate school-based mental health research. Stakeholders pointed out that schools that are enthusiastic about mental health support and have good communication within the whole school community are more likely to be successful partners in research. As well as this, a distributed leadership approach was highlighted as beneficial; senior staff, management and teachers alike having a stake in achieving the schools aims and objectives. This theme was encapsulated by a Stakeholder in reference to a replacement head teacher:

“...moving forward we know who’s going to be the replacement and [they are] more into promoting staff wellbeing and getting parents involved as it was previously, so I feel like actually it might be a good thing for us.” (SH13 – Educational psychologist)

5.2.3 Technology-based facilitators

5.2.3.1 Straightforward data collection

Technology was highlighted as a facilitator for practical reasons, allowing more straightforward data collection. It was felt that digital research techniques make data collection faster and safer than paper-based surveys. It was also felt that schools should have a technological infrastructure that would support research; for example, using spreadsheets to hold comprehensive pupil data.

Regarding digital data collection and interventions, it is important to identify the best digital solutions for the target population. Focus group participants reminded that CYP prefer messaging and gaming rather than sitting and talking on video chats together (FG2).

5.2.3.2 Easier dissemination

Also, technology was viewed as making it easier to share or give school staff access to results or reports if they are digitalised. This aspect is linked to the dissemination of findings.

“...I'm sure 90 percent of projects ...the results are a mystery to...to those who contributed. So a better way of doing that and I...again, I don't have, particularly, the answers but I guess digital is...has some of the solutions there also.” (SH3 – ARC researcher)

5.2.3.3 Autonomy

The ways in which technology facilitates school-based mental health research is not solely about the ease of use. Autonomy refers to the ability for children and young people to feel more confident to share their thoughts and experiences. It was highlighted that teachers, or the collection of data in the classroom via pen and paper, can be seen as a barrier to this. Digital data collection allows children and young people to respond to survey items more honestly, as they feel they are not being overseen by teachers.

5.3 Recommendations by Stakeholders

Based on their extensive experience, Stakeholders gave recommendations for future practice related to school-based mental health research. Six categories of recommendations were identified: challenging mental health stigma, supporting research culture, study design, engagement, collaboration, and funding.

5.3.1 Challenging mental health stigma

Challenging mental health stigma was highlighted as an important aspect of improving school-based mental health research. To achieve this the following strategies were recommended:

- 1) **Providing mental health education for school leaders and local authorities** to encourage them to understand their obligations in reducing the impact of poor mental health on CYP.

“...some schools sadly just don't see it as their... I think, actually it's not their role, and so there's a real teaching needed for the leadership teams within those schools, within those authorities.” (SH15b & SH17 – Charity sector researchers)

- 2) **Applying a systematic approach to school participation in mental health research**, to enable satisfactory engagement from school leaders and local authority. By widening participation, resistance from individual schools may be reduced. As highlighted earlier, some schools may currently be refusing participation in research if they feel it might highlight a mental health problem.
- 3) **Building mental health support into the structure of schools** to establish good practice, by ensuring wellbeing is practiced by staff, and pupils, and mental health is promoted through the curriculum, the pastoral care package and day-to-day school processes such as assembly, mentor group work, and health promotions. Allowing pupils to have a more open dialogue with school staff, their peers and overall reducing the fear of school-based mental health research within the whole school community.

“there’s a lot of appetite for this idea of a whole school approach to really try and build good practice regarding mental health wellbeing, physical health into the actual structure of the school and the ethos of the school.” (SH1 – ARC researcher)

5.3.2 Supporting a research culture in schools

The school environment is not naturally conducive to research. One way to improve engagement of schools in school-based mental health research is to embed a culture of research into the school environment. It was observed that this could be done in four ways:

- 1) ensuring that **researchers are present and accessible in schools**
- 2) incorporating **more mental health education in professional training** for teachers

“I mean, if they were taught that right at the beginning, it would sit with them, they’d be able to apply it to their practise, yeah.” (SH15b & SH17 – Charity sector researchers)

- 3) emphasising the importance mental health and wellbeing and of being involved in research in the **national curriculum**

“And actually, particularly with the events of the last 12 to 18 months, you know, with COVID, I think the curriculum needs to change to allow more time for mental wellbeing and PSHE and all of those kind of things.” (SH16 – Primary School teacher & Mental Health Lead)

- 4) senior leadership **accessing and prioritising research opportunities.**

5.3.3 Study design

Several recommendations were made regarding study design to support the research process:

- 1) **Engineering research designs to meet the needs of school communities**, being adaptable to include a variety of elements or techniques, including digital research. Study designs that reduce demand on schools are preferable. Research materials should be more digital based, such as online surveys and consent procedures. The COVID-19 pandemic has promoted the use of digital strategies, with some benefit to research, however, they should be exercised with caution.
- 2) **Considering what is feasible and devoting time early in the design process** to really understand school communities and the real-life demand of the proposed research.
- 3) **Utilising qualitative data collection** to offer powerful experience-based data that can be applied to a real-life context and help build understanding of CYP mental health.

“the stats are brilliant, they show us great things, enable us to go for funding and all of that stuff, the narrative is far more powerful is what we’re finding, especially coming through COVID because people are sharing their experiences (...) the narrative (...) it’s so pure, it’s so brilliant, the strength is unseen, I think, really.” (SH15b & SH17 – Charity sector researchers)

- 4) **Considering the various types of mental health and wellbeing issues** and the types of research being undertaken in schools. All aspects of CYP mental health should be investigated to paint an accurate picture of it.
- 5) **Paying due consideration to safeguarding** and having plans in place in case of adverse events.

“We should be able to do that, but it needs to be considered from the perspective of what are the potential risks, and like I say, having a very good relationship with the teachers that are in that school. And then knowing that if something does go wrong or something is discovered, then there is things that can be done to help. And that goes a long way to being able to do that research.” (SH1 – ARC researcher)

5.3.4 Engagement

Several recommendations were made for ways to improve engagement of schools in mental health research.

- 1) **Compromising research activities for a better fit with schools.** This refers to the ability to allow research to be tailored to individual schools, taking into consideration the capacity to be involved in a research project and reducing the likelihood of limiting participation.

“I just have really honest conversations with them saying, well, what’s the minimum you think you could do, do you think... You know, if there’s 10 things you’re asking them to do, we’ll come to a compromise. Not ideal always in research but sometimes you just have to do that, I think you have to compromise at schools.” (SH5 – ARC researcher)

- 2) When delivering a new project, researchers need to think about devoting time early to recruitment, advertisement and engagement, **allowing more time** to build stronger working relationships with senior leadership and key staff or stakeholders.
- 3) **Engaging parents to improve pupil response**, and having preliminary parental approval, to help schools feel more confident about taking part in and completing research projects. Researchers attending parents’ evenings to interact with parents, and being open and honest about associated risks are ways of getting parents interested in research projects.
- 4) **Showcasing results to schools**, for them to recognise the impact of research; either as reports from early data collection timepoints, if they are already on board, or reports from other schools if they are likely participants. Understanding the potential impact of an initiative can create buy-in from school-leaders and key stakeholders.

“so we’ve always tried to provide...yeah, tried to offer something that might be helpful for the school so that they don’t just feel they’re giving up their time and energy and, kind of, nothing is directly in it for them. So always share a report with the school and have a conversation early on with schools about what format that report might be most helpful for them. (...)...and also the study I’ve just finished, we were providing assessment reports for each individual family. (...)...that was often helpful for families, so yes, certainly making it...yeah, helpful for them just as...as individual families and schools to take part.” (SH7 – ARC researcher)

- 5) **Supervising teachers and staff to facilitate best practice.** Teachers who are holistically well supported are more likely to engage in additional duties such as coordinating research projects.

5.3.5 Collaboration

Stakeholders made three recommendations about collaboration.

- 1) **Connecting with parents.** CYP’s home lives are a large aspect of the environment in which they are growing up and will impact their mental health; bringing parents into research design as collaborators, for example to provide recommendations or feedback, and design recruitment procedures and research tools. This will help generate an understanding of how parents’ mental health ideologies are contributing to CYP mental health perceptions, how to address mental health stigma and the most effective ways to engage families in mental health research.
- 2) **Targeting active school-based stakeholders** to improve access and engagement with schools. Building a reciprocal relationship, whereby school-based stakeholders such as mental health leads, pastoral teams, and SENCOs, or the wider school community such as senior leadership, are provided mental health support resources in exchange for promoting research projects and encouraging pupils to take part.
- 3) Encouraging schools and researchers to **work in networks** across localities, to enable sharing of best practice and guidance.

“I’m sure there’s loads of other people looking out there, searching these kind of things and having access to what a good practice was the challenges that they face. That’s not readily and easily available, you can read the method sections in a paper just been published, but that’s

not going to give you the full picture. So, having networks of school's researchers, for example, where they can communicate and share this kind of information would be really useful as well.” (SH1 – ARC researcher)

5.3.6 Funding

Recommendations around funding for school-based mental health research were focussed on:

- 1) Offering **financial support for schools for longitudinal research**. Longitudinal research requires a greater investment of time and effort; hence, the advice to offer financial support or a reward to educators and/or participants.

“So, if they've got to do, like if they've got to do something over an extended time period and invest in it, then there probably have to be some financial support in terms of teacher buyout time or rewards to pupils and that sort of thing.” (SH14 – ARC researcher)

- 2) **Developing transparent school-based funding networks**. This means local authority-wide school-based networks bidding for larger pots of governmental mental health support funding. Better quality resources could be more accessible if **funding is transparently tendered out** through networks of schools. Larger amounts of money can have more impact, compared to diluted funding pots divided up equally across schools, regardless of the level of need. This may provide more substantial changes as those schools most in need can be prioritised for investment in better quality research and intervention packages.
- 3) **Developing corporate partnerships** for increasing research funding by businesses investing money in research projects in exchange for mental health workshops for staff and/or a level of public awareness of the role of the business in supporting CYP's mental health.

5.4 Impact of COVID-19

Given the timeframe when this research was started and undertaken (April 2020 – April 2021), the COVID-19 pandemic and consequent national lockdown restrictions dominated Stakeholders' experiences. The COVID-19 pandemic brought Stakeholders several challenges to navigate in their own research (or teaching) work.

“This situation has proved difficult to shift for some schools and further exacerbated by the COVID pandemic which has prevented the research team from physically attending parents' evenings and other school meetings in order to meet directly with families regarding the trial. In order to help improve uptake by families, and in face of this challenge, the research team has offered online meetings for families who want to find out more about the trial.” (SH18 – ARC researcher)

The pandemic initially exacerbated school refusals in research. Stakeholders with experience of continuing with research projects throughout the pandemic, reported that engagement became a challenge. Not gaining access to schools to promote research restricted recruitment, and also significantly diminished communication with schools who relied on parents to engage CYP in school-work and research activities. However, lockdown restrictions were also seen as an opportunity in some circumstances, e.g., enabling other types of research. The main topics discussed by Stakeholders were disruption, renewed interest in mental health research, digital working, and research designs.

5.4.1 Disruption

The frequent changes in pandemic restrictions made it confusing for CYP partaking in research due to ever-changing guidelines, meaning that outcomes were more likely to be disrupted.

“I think that there's been a diverse range of risk that schools have taken or not taken, and that has, again, fluctuated up and down, and then having three national lockdowns as well, that created issues, so we've had this kind of planning, not being able to do planning, doing, planning,

not doing, so I think the journey for the child through this has not been as clear and coherent as what we've previously had.” (SH15b & SH17 – Charity sector researchers)

When considering results of one wellbeing intervention, the pandemic restrictions played a significant role in diminishing outcomes; all participants showed a marked level of improvement, however, the distance travelled in improvement was considerably lower than pre-pandemic. This was due to a limited capacity for CYP to put the intervention in to practice.

Whilst some existing projects were able to maintain engagement with little disruption, most were curtailed early on due to schools prioritising the core curriculum. Teachers had to respond to many rapid, significant changes in working practices throughout the academic year. They became mentally exhausted, working in 'survival mode', and had limited capacity for further changes to their working practices to support school-based mental health research.

5.4.2 Renewed interest in mental health research

There was also a rise in mental health problems in CYP and negative outcomes for families, with fewer families approaching mental health and wellbeing support services. There was a significant rise in reports of suicidal ideations and anger issues through telephone helpline support.

“We're hearing reports from some of the telephone hotlines colleagues work on that there are spikes in things like suicidal thinking, huge amount of anger issues” (SH3 – ARC researcher)

For some young people the pandemic seemed to have had a positive impact on their mental health (e.g., for those with ASD), however it was unclear how they would react when they had to return to school (FG4).

Over a year into the pandemic, and given concerns regarding the mental health of pupils, schools have regained interest in mental health research projects. They are now happier volunteering in research studies involving interventions, and to have support from researchers (FG1, FG4). Projects that were curtailed early in the pandemic have been coming back on track.

“Unfortunately, the trial opened just as the COVID pandemic happened and, therefore, the majority of recruitment of partner schools had to be conducted online. Despite this challenge, it was, and is evident that schools in the UK fully understand and appreciate the importance of youth mental health research, the necessity of early intervention, the need for provision of a wide range of resources to support families of young people with depression and anxiety and the need for evidence based interventions.” (SH18 – ARC researcher)

5.4.3 Digital working

When the pandemic restrictions were enforced, schools were not initially prepared for digital working but had to quickly adapt to it. Mental health work that continued in a digital format were adversely affected due to several confounding factors: pupils' access to technology at home, teachers working capacity, school IT competency, and parental engagement.

“It's a lot sometimes about parents and lack of technology at home, so if the children aren't in schools we can't assess.” (SH13 – Educational psychologist)

It became apparent early on that CYP from low-income or vulnerable families – normally a key target group for interventions – were much more disadvantaged and less likely to have regular access to Wi-Fi or technology, and as a result less likely to take part in digital research.

Further into the pandemic, government actions improved CYP access to technology. However, this did not deter the challenge of participation as CYP using technology were more difficult to engage via virtual means due to the clinical or distant nature of digital methods; natural conversation is harder to replicate.

“Difficult to pick up on body language and conversation is more difficult to encourage via digital methods” (SH15a – Charity sector researcher)

With many CYP choosing to have their camera off during interactions, their physical safety could not be verified. Hence, virtual participation could be seen as a hinderance to safeguarding. The pandemic clearly showed that the assumption that CYP would be happy to engage online is not necessarily the case (FG4).

However, when considering benefits to access, digital research has eliminated geographical boundaries to recruitment, meaning there is greater potential for more national research. Also, training for school staff can be accessed remotely from further afield. With more virtual training opportunities available, there has been a rise in uptake of mental health and wellbeing training by school staff. Virtual meetings have been held also to engage parents:

“COVID pandemic which has prevented the research team from physically attending parents’ evenings and other school meetings in order to meet directly with families regarding the trial. In order to help improve uptake by families, and in face of this challenge, the research team has offered online meetings for families who want to find out more about the trial.” (SH18 – ARC researcher)

5.4.4 Research design

The pandemic forced changes to research design and practice. Creative solutions were needed to continue implementing research projects. Delivery modes had to become adaptable to meet the needs of changing pandemic restrictions, e.g., incorporating both digital and face to face methods in research designs. In addition, some adaptations had to be more focussed on the needs of CYP as the school environment was removed from the recruitment and participation process for some interventions.

Over a year into the pandemic and an increase in interest in pupil wellbeing and mental health research, there is a real opportunity to build on the positivity and grow a research culture with schools and families. However, research projects should still be mindful of teachers’ mental health and the extra pressures research projects may have on them (FG4). By building mutually beneficial research partnerships, research can support teachers’ wellbeing. For example, projects can promote guidance or help teachers choose evidence based online wellbeing classes to support their own MH.

5.5 ‘Breathe digital’ as a digital research tool

The ‘Breathe digital’ data collection platform has been designed by NHS Staff and a professional website design company (eSterling) in collaboration with University of Warwick academics, initially to gather annual wellbeing data from large cohorts of pupils across any regional schools. It utilises unique identifier codes to assign pupils a reference ID where data can be anonymously stored and added to over time. Originally developed (in 2019) in response to Coventry City Council’s need to measure wellbeing within schools, the research team recognised the potential of the platform to support (mental) health and wellbeing data collection or research within schools. We asked Stakeholders’ views regarding the platform and how best to develop it further to meet the needs of school-based (mental) health research. We present here some of the more generic responses regarding such digital data collection platforms.

As part of the interviews, Stakeholders were shown a presentation of the ‘Breathe digital’ (formerly ‘SchoolSpace’) data collection platform and associated tools. Stakeholders generally responded positively, describing the platform as ‘*useful in a pandemic*’, ‘*simple*’ and ‘*flexible*’. Most of the responses regarding ‘Breathe Digital’ concerned digital data collection more generally.

“I think it sounds amazing. And I think it’s needed, and I think that’s the main thing. Actually, from what you’ve described to me, I don’t think it’s that time-consuming.” (SH9 – Secondary school teacher & mental health lead)

Particularly during and post pandemic restrictions, one of the most popular opinions regarding digital data collection was **simplicity**, not only for researchers but school staff and pupils alike. Digital data collection

methods can streamline the research process, making recruitment of schools easier. Participant information leaflets and links to surveys can be sent via email and digital links to research tools shared via social media.

Online surveying tools fit the **technological ability** of the school environments. Pupils are so used to digital working that when a digital survey is presented as a practical task, it is much easier to complete:

“They’ve been absolutely quite nonchalant about it. You know, yeah, just, like, yeah, I filled it in. You know, no...no...no drama. Interestingly” (SH9 – Secondary school teacher & mental health lead)

Most secondary schools today will have a business manager with technological expertise in data management, like Microsoft Excel, to store pupils’ unique access IDs, which is needed to support the digital data collection platform.

“Secondary schools particularly academies will have a business manager who will have an admin who would definitely have the competency to run the measurement and generate pupil IDs” (SH12 – Chair of governors)

For researchers, online survey tools were seen as advantageous for their **flexibility**, with the potential to add more survey questionnaires or change features and response options. In addition, results can be more easily processed as a simple export function. As the system stores the anonymous data, there is no need to develop individual databases, presenting a substantial cost saving when setting up new research projects.

“so we’ve had to develop our own database, we’ve had to do all our syntax programming, we’ve had to do our scoring and everything ourselves that the advantage of this would be that that’s already...” (SH5 – ARC researcher)

When considering digital research methods, expense is an important factor to address; it can be expensive if schools do not have sufficient resources available to help with the initial set-up stage; and digital security can be expensive to set up or maintain. Digital security requirements can differ between ethics committees, it is important to consider the ongoing rental costs of a secure server to store data and website testing to secure against hackers.

6 Discussion

This guidance document is based on practical experience of various stakeholders working on the ground with substantial knowledge related to school-based mental health research. The following sections summarise the main findings regarding challenges and facilitators, as well as recommendations by Stakeholders who took part in interviews. Most of the challenges and facilitators were shared or common experiences across all or many of the Stakeholders, covering both primary and secondary schools.

6.1 Challenges

Regarding challenges, time was one of the most discussed points and was viewed as a challenge by all Stakeholders in some capacity. To successfully complete school-based mental health research, a lot of time needs to be invested by researchers to design robust research, build working relationships, recruit schools, deliver research, and maintain engagement. This can be easily underestimated in funding bids and research designs, typically leading to hinderances in dissemination to schools. Challenges were also associated with study design issues and communication problems; jargon contributing to the latter. Since CRN has only recently included school-based research in their portfolio, there has been little infrastructure available to support schools and researchers in the same way as NHS-based research.

One of the school-based challenges discussed by Stakeholders was prioritisation of the core curriculum and academic achievement over mental health (education). This affects the ability to fit in activities linked to research in the school schedule. A limited, or lay, understanding of mental health research by parents and school staff can also negatively impact the research process, with stigma and mistrust hampering participation of CYP and teachers. Lack of access to, and lower confidence or ability using, technology can also hinder participation in deprived areas if the research project relies on a high level of technology.

6.2 Facilitators

Stakeholders discussed a range of facilitators that counteract the challenges and support school-based mental health research. Most were research-based facilitators, i.e., the onus is on the research team to improve things. An important part is to involve CYP, teachers and other stakeholders via consultation early in the process to ensure that the research design and processes fit with the school environment. Identifying key school staff to enable effective communication and collaboration feed into better engagement with schools. The latter includes the establishment of collaborative networks between stakeholders and researchers, such as educational psychologists, and involving wider community in wellbeing interventions. Mental health training for staff and access to mental health support resources are examples of the type of incentives favoured by schools, based on exchange of services. Better results can also be obtained if researchers are proactive team players, resilient and rigorous in every step of the research.

Regarding school-based facilitators, schools that encourage the involvement of key staff in the research process as partners and generate an environment and culture that endorse mental health and wellbeing are likely to engage better with research projects in mental health. Technology can be a facilitator when used correctly; utilising digital research methods, particularly in the context of the COVID-19 pandemic, enables more concise data collection.

6.3 Recommendations by stakeholders

Stakeholders provided recommendations regarding school-based mental health research based on their extensive experience of research in schools, presenting either lessons learnt or substantial insight gained from working in the field. The recommendations were not limited to the school setting or research team; instead, they draw on some of the wider stakeholders and broader structures that support schools.

1. **Challenging mental health stigma** – Providing mental health education for school leaders and local authorities, using a systematic approach to enable active engagement with school-based mental health research from school leaders and local authority. This should also incorporate building mental health support into the structure of schools to establish good practice.

2. **Supporting a research culture in schools** – This could be done in four ways: 1) ensuring that, for active projects, researchers are present and accessible in schools; 2) incorporating more mental health education in professional training for teachers; 3) emphasising the importance of being involved in research linked to the national curriculum; and 4) senior schools leadership accessing and prioritising research opportunities.
3. **Study design** – Designing research to better fit with the school environment. Engineering research designs to meet the needs of school communities, being adaptable with methods or techniques, including digital research. Utilising qualitative data methodologies to capture powerful experience-based data. Considering what is feasible and devoting time early in the design process. Considering the various types of mental health and wellbeing issues in students and paying due consideration to safeguarding.
4. **Engagement** – Devoting time early to recruitment, advertisement, and engagement. Engaging parents to improve pupil response, and having preliminary parental approval, to help schools feel more confident about taking part in research study. Showcasing results to schools to highlight the impact of research and supporting teachers and staff to facilitate best practice.
5. **Collaboration** – Connecting with parents as collaborators, targeting active school-based stakeholder champions to improve access and engagement, and encouraging schools and researchers to work in networks across localities, to enable sharing of best practice and guidance.
6. **Funding** – Offering financial support for schools for longitudinal research in terms of teacher buyout time or rewards to pupils. Developing transparent school-based funding networks, i.e., local authority wide school-based networks collaborating on applications for mental health support funding. Developing corporate partnerships for increasing research funding by businesses investing money in research projects.

6.4 Reflection on findings

A large part of the challenges and facilitators are relevant to any type of health research in schools (21).

Whilst this report has demonstrated the barriers that exist when endeavouring to engage and enable youth mental health research *within* a school environment, including time constraints, capacity and ‘buy-in’, additional difficulties can also arise when research teams utilise schools as recruitment sites for research that takes place in an external setting.

This is especially the case with challenges and facilitators that are dependent on the research team. With schools as the research setting, careful thought has to go into the study design and processes whether the research is linked to physical or mental health. Better results are obtained if the design allows plenty of time for initial engagement within schools and for each stage of the research, the study documents are free of ‘research jargon’, and the research team, or the key researcher communicating directly with the school, tries to learn some ‘school jargon’. Consulting CYP and parents early in the process are also an expected practice in most research involving CYP. However, the sensitive nature of mental health means that extra thought must go into how data will be collected from pupils so that answers are kept confidential. This is where digital data collection has an advantage over paper-based questionnaires, however, issues around accessibility to technology must be resolved, especially in more deprived areas.

Finding time in the curriculum for research activities is a problem for schools, whether the research is linked to physical or mental health. Also, teacher-led data collection and interventions are taxing whatever the topic, so measures must be put in place to support them. However, in the past, physical health has been prioritised (in the curriculum, in school activities and as a research topic), and mental health as a topic is less well understood in schools, partly also due to the ‘invisibility’ of common mental health problems. Improving teachers’ mental health literacy is a recommended trade-off for schools taking part in mental health research. Parents’ fear associated with, and misunderstanding regarding, mental health research may also jeopardise participation of students. Extra effort and time are therefore needed to alleviate their concerns, and this may be best undertaken more directly, by organising a parents’ evening, rather than just via email. Mental health research in particular will benefit from a school culture that nurtures students’ and staff

mental wellbeing and is proactive regarding mental health support. Schools with this approach are more likely to be successful partners in research, in addition to those which employ a whole school approach with distributed leadership.

For improving school engagement, the stakeholder recommendations underline the importance of not limiting activities to the level of teachers or single schools. Involving educational psychologists, who work across schools, as partners in research will most likely help with access and engagement in mental health related research. In addition, improving mental health literacy of school leaders and people in power at the local authority level can help move things along on the ground. Normalising the conversations around mental health at all levels and creating a culture of safety where people feel comfortable discussing various aspects of mental health and wellbeing can help alleviate stigmas from misguided views, misconceptions, and stereotypes, and thus promote participation in research which ultimately aims to improve mental health and wellbeing of CYP. Applying a systematic approach to school participation can also alleviate concerns of individual schools in taking part, if they fear that the research might uncover problems with mental health and wellbeing in their schools.

The COVID-19 pandemic has unwittingly benefitted the field of mental health research in schools, as it has put CYP mental health and wellbeing on the front pages of various media outlets. More schools are interested in supporting the mental health and wellbeing of their students, thus are more willing to participate in research/interventions that promote this aim. Digital communication and data transfer have become the norm for pupils and teachers alike in schools, even in disadvantaged communities. Digital data collection is therefore the ideal solution for mental health research in schools; however, the shortcomings of this form of data collection must be kept in mind to minimise non-completion.

6.5 Comparison with other literature

There is a dearth of literature providing practical guidance for conducting school-based mental health research. Whilst non-mental health specific, the guidance Bartlett, et al. (2017) provide is very detailed and practical (21). For example, in association with partnering with schools they suggest using school classrooms as a venue or space for research if the research is conducted in the school immediately after school hours, but also warn of possible interruptions from out-of-school clubs. The guidance is based on the experience of one research team in the USA, supplemented via a literature review, hence it is more focused on the American school system and setting. The article still makes an interesting and useful read, considering the lack of literature in this field of research.

Felzman (2009) draws attention to ethical issues in school-based research, covering any research, not specifically mental health research (33). She points out that the majority of children's research takes place in school settings, yet school-based research is not a particularly prominent topic in the research ethics literature, and there is a general lack of educational representation on research ethics committees, potentially due to the perception that school-based research is particularly risk-free. Felzman discusses the various forms of informed consent in the school setting and promotes the active involvement of CYP at an early stage of the process. This is ethically desirable if their role as active and reflective participants is to be taken seriously. On the other hand, various barriers might hinder such involvement, e.g., established gate-keeping practices, the ethos of schools, or limited research resources. Felzman also focuses on the role conflict when teachers are put in charge of obtaining consent, as well as the impact of the school setting and peer pressure on CYP to participate in research (33). As far as research topics are concerned, Felzman points out that there is a tendency to impose restrictions on any research that addresses sensitive issues, including mental illness and death and dying, in order to avoid the risk of emotional upset. However, this may underestimate the ability and willingness of students to engage with sensitive and possibly upsetting issues, and may prevent the creation of a solid evidence-base on issues that affect CYP's lives (33).

Most other relevant literature discussing school-based mental health research is associated with systematic reviews of either universal or targeted (mental) health intervention studies, the majority of which have been conducted abroad (especially USA and Australia). Such reviews usually focus the discussion on the nature and features of the interventions impacting success of implementation. However, in the systematic review of targeted interventions, Gee, et al. (2021) delineate, in addition, factors associated with organisational

capacity and training and technical assistance in relation to the delivery of the intervention, provider characteristics, and community factors (16). Their analytical theme of “relationships between intervention facilitators and school staff”, included in 20 studies, emphasises the role of collaboration and communications in sustaining school-based mental health research. Maintaining positive reciprocal relationships between researchers and key school staff are necessary for completing good quality research. Collaboration is equally important to be able to effectively synthesise the unique culture of schools into research designs. Implementing a model of consultation with key stakeholders, including CYP, parents, school staff, and/or school leaders, was regarded as one of the more effective ways to collaborate in a meaningful way to benefit schools. Furthermore, developing localised networks creates an established route of accessibility for future collaborations. This mirrors our findings too.

The analytical theme of ‘school environment’ described by Gee, et al. (16) also captures the challenging school environment not conducive to school-based mental health research. Fundamentally, schools are very busy and focused on an academic curriculum model, emphasising attainment and often over-stretched – even more so during the COVID-19 pandemic – and underfunded. However, logistical issues can be addressed by educating staff, and emphasising elements such as the evidence-base associating mental health and attainment. This can encourage buy-in from staff, alongside support to champion research. School-based mental health research plays a significant role in stimulating mental health promotion within schools, raising awareness alongside participation, which can result in more CYP mental health research.

The recent report by Procter, et al. (34) contains a review and summary of the literature associated with whole school approaches to emotional wellbeing and mental health, and an evaluation of best practice on work undertaken by Mental Health Support Teams (MHSTs) to support whole school approaches (WSA). The report highlights that while much progress has been made in schools in the in the South-East and East of England, more needs to be done to achieve consistently high level of whole school engagement with a mental health strategy. Two of the areas that need improvement or more attention include data collection to identify mental health needs of CYP, and the use of data to inform mental health work (34). One of the recommendations of the report is to systematically gather and collate evidence of the WSA profile across multiple time points, tapping into how different aspects of WSA are being delivered and implemented. Thus, whilst facilitating mental health research, a whole school approach clearly necessitates data collection to evaluate its effectiveness.

6.6 Limitations

Whilst our findings have highlighted some distinct challenges and facilitators to delivering school-based mental health research, with the COVID-19 pandemic, the ability to recruit a balanced and inclusive sample of key stakeholders, school-based professionals, CYP and parents/carers was significantly impacted, and therefore results should be considered with caution or in a local context. The ability to sustain communication with a number of schools and organise focus groups with CYP was restricted by difficulty establishing a strong communication line via email only (school offices were closed) and, with the rapidly changing school-based pandemic guidelines, securing a time to undertake a focus group was not possible.

A school-based perspective is voiced by a school governor, primary school teacher and secondary school teacher, all based in schools in one local authority. However, when considering the types of facilitators, challenges and recommendations highlighted by all Stakeholders, there was a good level of cohesion between Stakeholder responses, suggesting the responses of school-based professionals could be comparable to a wider population.

Further research into the practicalities of conducting school-based mental health research should engage children and young people and parents/carers to ensure their views and experiences are included.

7 References

1. Department of Health & Social Care, Department for Education. Transforming children and young people's mental health provision: A green paper. Assets Publishing website. 2017.
2. NHS Digital. Mental Health of Children and Young People in England, 2017: Trends and characteristics. NHS Digital; 2018.
3. Newlove-Delgado T, Williams T, Robertson K, McManus S, Sadler K, Vizard T, et al. Mental Health of Children and Young People in England, 2021. Wave 2 follow up to the 2017 survey. NHS Digital; 2021.
4. Ford T, John A, Gunnell D. Mental health of children and young people during pandemic. *BMJ*. 2021;**372**:n614.
5. OECD. Supporting young people's mental health through the COVID-19 crisis: OECD; 2021 [Available from: <https://www.oecd.org/coronavirus/policy-responses/supporting-young-people-s-mental-health-through-the-covid-19-crisis-84e143e5/>].
6. BMA. The impact of COVID-19 on mental health in England; Supporting services to go beyond parity of esteem: BMA; 2020 [Available from: <https://www.bma.org.uk/media/2750/bma-the-impact-of-covid-19-on-mental-health-in-england.pdf>].
7. Adelman HS, Taylor L. Mental health in schools and system restructuring. *Clinical Psychology Review*. 1999;**19**(2):137-63.
8. Weare K. What works in promoting social and emotional well-being and responding to mental health problems in schools. London: National Children's Bureau; 2015.
9. Champion J. Public mental health: Evidence, practice and commissioning. London: Royal Society for Public Health; 2019.
10. Clarke A, Sorgenfrei M, Mulcahy J, Davie P, Friedrich C, McBride, T. Adolescent mental health: A systematic review on the effectiveness of school-based interventions. London: Early Intervention Foundation; 2021.
11. Public Health England. Improving Young People's Health and Wellbeing: A Framework for Public Health. London: Public Health England; 2014.
12. Amholt TT, Dammeyer J, Carter R, Niclasen J. Psychological Well-Being and Academic Achievement among School-Aged Children: a Systematic Review. *Child Indicators Research*. 2020;**13**(5):1523-48.
13. Public Health England. Measuring Mental wellbeing in Children and Young People. London: Public Health England; 2015.
14. Mackenzie K, Williams C. Universal, school-based interventions to promote mental and emotional well-being: what is being done in the UK and does it work? A systematic review. *BMJ Open*. 2018;**8**(9):e022560.
15. Fazel M, Hoagwood K, Stephan S, Ford T. Mental health interventions in schools in high-income countries. *Lancet Psychiatry*. 2014;**1**(5):377-87.
16. Gee B, Wilson J, Clarke T, Farthing S, Carroll B, Jackson C, et al. Review: Delivering mental health support within schools and colleges - a thematic synthesis of barriers and facilitators to implementation of indicated psychological interventions for adolescents. *Child and Adolescent Mental Health*. 2021;**26**(1):34-46.
17. Wight D, Wimbush E, Jepson R, Doi L. Six steps in quality intervention development (6SQuID). *Journal of Epidemiology & Community Health*. 2016;**70**(5):520-5.
18. Aarons GA, Hurlburt M, Horwitz SM. Advancing a Conceptual Model of Evidence-Based Practice Implementation in Public Service Sectors. *Administration and Policy in Mental Health and Mental Health Services Research*. 2011;**38**(1):4-23.

19. Humphrey N, Wigelsworth M. Making the case for universal school-based mental health screening. *Emotional and Behavioural Difficulties*. 2016;**21**(1):22-42.
20. Hudson KG, Lawton R, Hugh-Jones S. Factors affecting the implementation of a whole school mindfulness program: a qualitative study using the consolidated framework for implementation research. *BMC Health Services Research*. 2020;**20**(1):133.
21. Bartlett R, Wright T, Olarinde T, Holmes T, Beamon ER, Wallace D. Schools as Sites for Recruiting Participants and Implementing Research. *Journal of Community Health Nursing*. 2017;**34**(2):80-8.
22. Colizzi M, Lasalvia A, Ruggeri M. Prevention and early intervention in youth mental health: is it time for a multidisciplinary and trans-diagnostic model for care? *International Journal of Mental Health Systems*. 2020;**14**(1):23.
23. MacNeil AJ, Prater DL, Busch S. The effects of school culture and climate on student achievement. *International Journal of Leadership in Education*. 2009;**12**(1):73-84.
24. Kaluzeviciute G, Jessiman T, Burn AM, Ford T, Geijer–Simpson E, Kidger J, et al. Participatory Action Research on School Culture and Student Mental Health: A Study Protocol. *International Journal of Qualitative Methods*. 2021;**20**.
25. Stoll L. School culture. *School Improvement Network's Bulletin*. 1998;9.
26. Lester L, Cross D. The Relationship Between School Climate and Mental and Emotional Wellbeing Over the Transition from Primary to Secondary School. *Psychology of Well-Being*. 2015;**5**(1):9.
27. Public Health England. Promoting children and young people’s emotional health and wellbeing. A whole school and college approach. London; 2021.
28. Department for Health & Social Care, Department for Education. Government Response to the Consultation on Transforming Children and Young People’s Mental Health Provision: a Green Paper and Next Steps. London; 2018.
29. Public Health England. Universal approaches to improving children and young people’s mental health and wellbeing. Report of the findings of a special interest group. London; 2019.
30. Das JK, Salam RA, Lassi ZS, Khan MN, Mahmood W, Patel V, et al. Interventions for Adolescent Mental Health: An Overview of Systematic Reviews. *Journal of Adolescent Health*. 2016;**59**(4S):S49-S60.
31. Simkiss NJ, Gray NS, Malone G, Kemp A, Snowden RJ. Improving mental health literacy in year 9 high school children across Wales: a protocol for a randomised control treatment trial (RCT) of a mental health literacy programme across an entire country. *BMC Public Health*. 2020;**20**(1):727.
32. Ellins J, Singh K, Al-Haboubi M, Newbound J, Hocking L, Bousfield J, et al. Early evaluation of the Children and Young People’s Mental Health Trailblazer programme. Interim report. Birmingham: School of Social Policy, University of Birmingham; 2021.
33. Felzmann H. Ethical issues in school-based research. *Research Ethics Review*. 2009;**5**(3):104-9.
34. Procter T, Roberts L, Macdonald I, Morgan-Clare A, Randell B, Banarjee R. Best Practice Review of Whole School Approach (WSA) within MHSTs in the South-East and East of England. Evaluation report. Brighton: University of Sussex; 2021.

Appendix 1

Topic guide for Researchers

Researchers will be engaged to gain their views and knowledge about best practice regarding school-based (mental) health & wellbeing research/activities. The topic guide will be reviewed after each interview and modified if needed to ensure that we capture all relevant information.

- 1) Past experience of engaging schools in (mental) health & wellbeing (MHWB) related research and/or activities
 - a. Research/activity topic
 - b. Primary/secondary schools
 - c. When & Where
 - d. General impression of the success of the studies/activities (achieved aims and objectives)?
 - e. What would you have done differently?

- 2) Main difficulties faced conducting school-based MHWB research/activities
 - a. Exploration of barriers
 - i. Factors linked to research topic, team, methods;
 - ii. Factors linked to schools, staff and students

- 3) What has helped solve difficulties/problems
 - a. Exploration of facilitators

- 4) Lessons learnt engaging schools (primary / secondary) – best practice/key advice
 - a. Study topic – how does this influence engagement
 - b. Study documents
 - c. Ethics approval
 - d. Logistics (gaining access and permission; gaining entry and collaboration to specific schools; initial key contacts within schools)
 - i. (Initial) communication – style, length, format
 - ii. Timing
 - e. Staff training & engagement
 - f. Consent procedures
 - i. Parental involvement
 - ii. Practicalities
 - g. Recruitment of pupils/students
 - h. Recruitment of parents (if part of study)
 - i. Method of data collection & practicalities
 - i. Questionnaires – paper copies vs online
 - ii. Focus groups
 - iii. Qualitative 1-2-1 interviews
 - j. Timeline
 - k. Other study processes
 - l. Incentives
 - i. Incentives for schools
 - ii. Incentives for the participants

- 5) Willingness to review draft report and provide feedback

Demonstration of SchoolSpace (now *Breathe Digital*) platform – current use (a short demo film may be created for this purpose, consisting of slides)

- 6) Views on SchoolSpace platform (after demonstration)
- 7) Potential of SchoolSpace platform
- 8) Ideas on how to develop it further
- 9) Perceived barriers to launching SchoolSpace as research/monitoring platform
- 10) Perceived facilitators for launching SchoolSpace as research/monitoring platform