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# The Adaptation of the Connect Health and Well-being Curriculum to the Health and Well-being Area of Learning and Experience, Welsh Curriculum.

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# The Adaptation of the Connect Health and Well-being Curriculum to the Health and Wellbeing Area of Learning and Experience, Welsh Curriculum.

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# Contents

## Chapter 1: Introduction to health and well-being in Wales

### Abstract

The studies in this dissertation investigate how health and well-being education in Wales is evolving in the midst of three major events, the global mental health crisis (Roffey, Williams, Greig & Mackay, 2016), the COVID-19 pandemic (Agarwal et al., 2021), and the curriculum reform in Wales (Welsh Government, 2020a). This thesis comprises five chapters detailing three studies. In Chapter 1, a literature review was undertaken in order to provide a comprehensive overview of the current health and well-being climate in Wales and the UK. In Chapter 2 we provide a rapid review of the health and well-being interventions and curricula currently used across primary schools in the UK and the evidence base for them. Our review indicates that the approach with the most evidence of effectiveness are Cognitive Behavioral Therapy (CBT) based interventions. However, weaknesses associated with many of the studies limit the extent to which any program can be endorsed as an 'evidenced-based' school health and well-being intervention. In Chapter 3, we created a mapping template to assess the extent to which the Connect curriculum can be mapped onto the health and well-being Area of Learning and Experience (AoLE) of the Curriculum for Wales. Connect is a new curriculum based on the DNA-V model, that uses Acceptance and Commitment Therapy (ACT) theory and research. It was found that Connect learning objectives were able to be mapped onto 95.7% of targets set by the Welsh Government, with almost 60% of Connect curriculum objectives being considered easy to map onto the Welsh curriculum (with 82.1% inter-rater reliability). In Chapter 4, in order to investigate teachers views, perceptions and experiences of using the Connect curriculum, we conducted interviews with 7 primary school teachers across North Wales, and their responses were examined using Thematic Content Analysis (TCA). The TCA revealed six main themes relating to: initial feelings, the Connect curriculum, training, support, suggestions for improvement and Connect legacy. Each main theme was broken down into a number of subthemes, the most significant of which included: the useful nature of the materials and website, the enjoyable and engaging nature of the program, the benefits of both the mindfulness element of the program and the Advisor component of the DNA-V model, the stronger bond reported between teachers and pupils, and the challenges surrounding difficult Connect content. Finally, Chapter 5 offers a discussion of the findings in the context of the literature, and recommendations for future research in this area.

## Literature review

### The global mental health crisis

Health and well-being are topics that have garnered considerable interest within the last decade, however, there remains some debate concerning the definition of these concepts. The World Health Organization (WHO) considers health to be ''a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (World Health Organization, 1996). It also considers mental health to be a 'state of well-being in which the individual realizes his or her own abilities, can cope with the normal stress of life, can work productively and fruitfully, and is able to make a contribution to his or her own community' (World Health Organization, 2013). Both definitions are generally well accepted, however, when it comes to defining well-being, multiple definitions of the concept exist and generally fall into two categories; subjective and objective well-being (Dodge, Daly, Huyton & Sanders, 2012). Subjective well-being centres around personal satisfaction with life experiences, whereas objective well-being is concerned with quality-of-life criteria, such as money, nutrition, shelter and social relationships (Western & Tomaszewski, 2016). This research project is concerned specifically with mental health and well-being provision in UK primary schools and defines well-being as 'a concept that refers to people's capacity to live healthy, creative and fulfilling lives' (Western & Tomaszewski, 2016).

As research investigating the different facets of health and well-being advances, nations across the globe are increasingly making the health and wellbeing of their residents a priority. All 27 UN members have publicly declared their support for the 2030 17 Sustainable Development Goals (SDGs) (United Nations, 2015), one of which seeks to endorse well-being and a healthy way of living for individuals of all age groups (Ross et al., 2020). Improving the well-being of children and adolescents has been highlighted as a particular priority, as it has been demonstrated that 1 in 8 0–25-year-olds will struggle with mental illness at some point (Sadler et al., 2018), with the most prevalent conditions being anxiety and depression (March, Stapley, Hayes, Town & Deighton, 2022). This is concerning not only due to the devastating damage such conditions can have on young people's well-being, but also due to their association with poor academic attainment, substance misuse, and criminal behavior (Agnafors, Barmark & Sydsio, 2021; Conway, Swendsen, Husky, He & Merikangas, 2016; Kim, Gilman, Kosterman & Hill, 2019).

New data revealing a reported decline in the mental well-being of children and adolescents prompts concern and a united stance across many areas of society to tackle this growing crisis (Roffey, Williams, Greig & Mackay, 2016). In particular, the WHO has placed significant emphasis on the role that schools should play in promoting pupils' mental well-being (Langford et al., 2014). Schools are now widely considered to be crucial mediums through which well-being interventions are enrolled, with evidence to suggest that when education-based well-being programs are delivered to pupils, they have the potential to be successful (Clarke et al., 2021). It is thought that schools are such important facilitators for nurturing health and well-being due to the fact that the majority of pupils spend a large portion of their childhood and adolescent lives there (Tome, Almeida, Ramiro & Gaspar, 2021). This means that teaching staff are able to monitor the health and well-being of their pupils on a daily basis, respond appropriately to signs of deteriorating mental health, and strengthen their ability to cope with everyday stressors (Pulimeno, Piscitelli, Colazzo, Colao & Miani, 2020). Unlike school-based staff, many external mental health professionals lack the capacity in time and resources to build up a rapport and a comprehensive picture of a child's well-being. In addition, if health and well-being programs are rolled out on a whole-school basis, where it is made clear that everybody can benefit from learning to protect their mental well-being, it may reduce the stigma surrounding accessing mental health support for pupils particularly in need (Roffey et al., 2016). Finally, education is a context in which the foundations for developing multiple essential life skills are laid down (Goldberg et al., 2019). Therefore, if schools are additionally able to lay down the foundations for developing life-long habits that promote well-being, pupils may be better prepared to protect their emotional, physical and mental health in the future.

Well-being provision in primary vs secondary settings

Despite the clear role that schools play in the health and well-being provision for pupils of all ages, primary and secondary school approaches appear to differ. The most recent UK government report, which was published in 2018 by the Department of Education (DfE), found that primary institutions appeared to be doing more to promote the mental health and well-being of their pupils than secondary institutions, with 56% of primary schools offering pupil well-being provision compared to 44% of secondary schools (Department for Education, 2018). For 29% of primary schools, this wellbeing support was enrolled across the whole institution, compared to 18% of secondary schools. There also

appear to be differences in the content of the mental well-being support provided between primary and secondary schools. For example, recent reviews of health and well-being interventions used across UK schools found that although CBT based programs were the most prevalent across both primary and secondary schools, secondary schools were also more likely to employ programs targeting positive psychology, mindfulness, Social and Emotional Learning, interpersonal therapy, and behaviour programs such as Thinking about Reward in Young People, which helps adolescents to assess and navigate risky behaviors (Caldwell et al., 2019; Cilar, Stiglic, Kmetec, Barr & Pajinkihar, 2020; Mackenzie & Williams, 2018; Rice et al., 2015).

The 2018 UK government report also revealed that when implementing targeted interventions, which are delivered only to pupils who are considered ‘high risk’ when it comes to their mental well-being (Arango et al., 2018), primary schools were more likely to identify such pupils using standardized measures such as the Strengths and Difficulties Questionnaire. Secondary schools on the other hand, were more likely to identify ‘high risk’ pupils if they disrupted lessons or performed poorly. Targeted interventions at the secondary school level were also more likely to involve counselling sessions outside of school and anger management coaching (Department of Education, 2018). Differences may be due to the varying needs of older secondary pupils compared to younger primary pupils. As pupils progress through secondary school, they experience the beginnings of adolescence, a phase characterized by profound physical, social and emotional change (Thorisdottir et al., 2021). It is perhaps no surprise then that adolescence is a life stage associated with increasingly poor mental well-being (McGorry, Bates & Birchwood, 2013), which is in turn associated with increased prevalence of drug and alcohol misuse as well as anti-social and risky behavior (Goodyear-smith, 2017; Knight & Samuel, 2022). Therefore, much of the health and well-being intervention work occurring at a secondary school level is concerned with treating the emotional distress that may occur during a time of such intense change.

In contrast, health and well-being interventions at a primary school level are more likely to centre around the creation of life long healthy habits, in order to prevent the occurrence of poor mental health in the first place. In their review, Kessler et al. (2007) report that around fifty percent of mental illness occurs before young people turn 15 years old. Childhood-emerging mental illness is related to poor adult quality of life (Patel, Flisher,

Hetrick & McGorry, 2007), unemployment (Egan, Daly & Delaney, 2015) and reliance on drugs and alcohol (Groenman, Janssen & Oosterlaan, 2017). Therefore it is essential that mental well-being interventions are implemented as early as possible to protect young learners against such negative outcomes. Early primary education institutions are perfectly placed to help offset such later life adversities, by providing health and well-being education that promotes the development of healthy, confident individuals who have the tools to flexibly cope with instances of hardship they may encounter throughout their lives (Fenwick-Smith, Dahlberg & Thompson, 2018).

Despite the acknowledgement of the importance of early health and wellbeing interventions, most of the research investigating school-based approaches to health and well-being has focused on provision at the secondary level (Darling et al., 2021). While this limited interest at a primary school level is a concern in its own right, the well-being of young children warrants particular research and evaluation due to a number of additional barriers, highlighted by Darling and Oberklaid (2019), that may hinder mental well-being provision in UK primary schools. For example, throughout childhood, an individual's mental well-being is more dependent on their caregiver, however there is evidence to suggest that adults' awareness of issues surrounding child mental well-being is inadequate. There have also been reports to suggest that children's well-being services, such as CAMHS (Child and Adolescent Mental Health Services) and CYPMHS (Children and Young People's Mental Health Services), can be difficult to access and navigate (Hansen, Telleus, Mohr-Jensen & Lauritsen, 2021). In addition, a school's ability to provide well-being support can sometimes be restricted, as mental illness can often go undetected in young people (Soneson et al., 2020). Further, those who have been identified as needing help may not receive the intervention required to support them due to their caregiver not providing consent (Darling & Oberklaid, 2019). There is therefore a clear need for institutions to roll out whole- school approaches to health and well-being as a mandatory part of the curriculum. However, in order for this to be successful we need to know which health and wellbeing approaches are based on research and have been empirically shown to exert positive outcomes.

At present, the most recent evaluations of health and well-being provision in UK primary schools demonstrate that the majority of interventions are concerned with improving the self-esteem and resilience of young children, or are CBT or Social and Emotional Learning (SEL) based interventions. (Banerjee, McLaughlin, Cotney, Roberts & Peereboom,

2016; Caldwell et al., 2019; Dray et al., 2017; Department of Education, 2018; Mackenzie & Williams, 2018). CBT aims to alter the negative thinking patterns of individuals, so that such thoughts have less of an impact on a person's feelings and emotional state (Spector et al., 2012). There is some tentative evidence to suggest that primary school CBT interventions can lower anxiety and improve the self-esteem and coping skills of young pupils aged between 4-12 years old in the UK. (Caldwell et al., 2019; Mackenzie & Williams, 2018). However, few of these studies included significant follow up periods, and those that did found that any impacts resulting from CBT-based programs disappeared two years post intervention. SEL approaches, which aim to support pupils emotional development and interpersonal skills (Murano, Sawyer & Lipnevich, 2020), have also been demonstrated to positively impact primary school student's challenging behavior (Wong, Li-Tsang & Siu, 2014), and emotional self-regulation (Coskun, 2019). However, the quality of SEL investigations varies greatly, calling into question the validity of their success (Wigelsworth, Verity, Mason, Qualter & Humphrey, 2022). Finally, Dray et al. (2017) reported that resilience focused early interventions reduced anxiety and psychological distress for UK student ages 5-10 years old, with the outcome of reduced psychological distress persisting at an 18 month follow up assessment. However, the lack of a longer term follow up period and possibility of bias limit the conclusions we can draw about such interventions (Dray et al., 2017). Despite some of the weaknesses associated with primary school health and well-being interventions, by implementing them as soon as pupils enter mainstream education it maximizes the possibility that they will have a positive impact at a crucial developmental stage. This preventative approach means that children are actively strengthening their ability to cope mentally, and reduces the likelihood that they will require reactive well-being interventions later in life (Fenwick-Smith et al., 2018), which appears to be the approach more commonly adopted at a secondary level.

Health and well-being approaches in England vs Wales

There are also significant differences in the way that health and well-being is approached across the different UK nations. In Scotland, health and well-being in schools is split into 6 key areas, the first of which is mental, emotional, social and physical well-being, through which children learn to recognize and express their emotions, rights and responsibilities and about diet, hygiene and exercise (PSHE Association, 2023). Similarly in Northern Ireland, a framework has been developed, organized around 5 key aspects of emotional well-being; self-awareness, self-control, motivation, social, resilience and coping,

and promoted in three ways; universally to all pupils, to small groups of pupils who may need additional support, and through an enhanced support stage, where at risk pupils require professional one-to-one support (Department for Education, 2021). Personal, social, health and economic (PSHE) is statutory in Scotland, as it is in Wales, however, it is a non-statutory subject in Northern Ireland and England. As a result, many differences are apparent in the health and well-being education between the four nations. Ideally, this Master's dissertation would include an in depth exploration of the similarities and differences between the school-based well-being provision of all four nations, however given the time constraints of the research it was only possible to explore provision within the nations of England and Wales. In future, the researcher would like to broaden the scope of this review to include provision across the nations of Scotland and Northern Ireland.

The English national curriculum is structured around core and foundation subjects, with formalized testing routinely carried out at the end of each progressive stage, known as key stages (Department for Education, 2014). PSHE education is not mandatory in England (Department for Education, 2021), however, teachers are required to deliver relationship education at a primary school level, and relationship and sex education (RSE) at a secondary level. This lack of explicit guidance on when and where to teach about health and well-being, combined with a heightened focus on academic testing leaves little room to explore the subject (Department for Education, 2010). Indeed, it has been reported by the PSHE Association (2013), that at the time, educational institutions were struggling to find time to educate pupils about their own well-being due to pressures to produce outstanding results in the core subjects. However, the thinking that a focus on pupil health and well-being will result in reduced educational attainment is not supported by the literature (Bonell et al., 2014). For example, schools in Finland, Sweden and Australia all promote the teaching of student mental and emotional well-being, and yet consistently outperform England (Humphrey, 2013). It has also been demonstrated that when institutions, like those in England, are overly concerned with pupil performance rather than overall development, it can actively be harmful to pupil mental well-being, (Kruger, Wandle & Struzziero, 2007).

There is therefore a clear need to support student health and well-being in schools. This has been acknowledged to some extent in recent years by the English Government,

and in 2017 led to the publication of the ‘Transforming children and young people’s mental health provision: a green paper’ (Department for Education, 2017), a piece of legislation that aims to increase mental health and well-being support for children and adolescents, particularly in education. The paper stated that £1.4 billion was to be allocated to children’s mental health services between 20172022, and that one of its targets was to support all schools in the identification and training of a designated well-being leader. The role of the well-being leader was to promote health and well-being across the whole school, and keep up to date with the latest changes in health and well-being policy and guidance. In addition, the paper restates the aims set out in the Department for Education 2016 report, where it was proposed that teacher training programs include information about identifying and responding to signs of emotional distress and poor well-being (Department for Education, 2016). Although at the time of writing the researcher was unable to find any published information available about the impact that this green paper has had on health and well-being provision in schools in England, at the time of the report (2017), it was found that almost 50% of English schools had identified a well-being leader, and over 60% of educators believed that there was a whole-school approach to health and well-being within their place of work. However, over 30% of educators felt they were unprepared to support pupils who struggled with their emotional wellbeing, and concerningly over 20% were unaware of how to access school-based support for struggling pupils (Department for Education, 2017).

Wales on the other hand has a vastly different approach to the promotion of health and well-being in schools. Since the devolution of the UK in 1999, the Welsh Government has been granted full control over educational policy and practice (Reynolds, 2008). Since then, reports of a failure to achieve satisfactory results on standardized testing, such as the Programme for International Student Assessment (PISA) which assesses student proficiencies in literacy, maths and science at 3-year intervals (National Foundation for Education and Wales, 2019), has resulted in Wales moving away from an attainment motivated approach and towards a pupil-centered approach to learning (Evans, 2022). In 2022 a new curriculum for Wales was introduced, where instead of learning being based around core and foundation subjects, as in England, it is based around 4 key purposes, where pupils are considered to be; ‘ambitious capable learners, enterprising, creative contributors, ethical, informed citizens, and healthy confident individuals’ (Jones, 2023). Within this system, education is based around 6 Areas of Learning and Experience

(AoLEs); Expressive Arts, Health and Well-being, Humanities, Languages, Literacy and Communication, Mathematics and Numeracy, and Science and Technology (Welsh Government, 2020a). This revolutionary new curriculum not only brings with it a reduced focus on standardized testing in Wales, which is in turn thought to boost self-esteem and mental well-being (Power, Newton & Taylor, 2020), but emphasizes the need to prioritize the health and well-being of each pupil as an individual. The health and well-being AoLE, which replaced the 2008 curriculum's Personal and social Education (PSHE Association, 2021), comprises 5 'what matters' statements which provide an overview of the content to be covered, including; physical health and well-being, mental and emotional well-being, decision making, and social relationships. Within these statements, there are also descriptions of learning provided, which set out the skills and knowledge children should gain as they move through each 'what matters' statement (Welsh Government, 2020b).

Under the new curriculum, educators are urged to approach teaching with flexibility and creativity, tailoring learning to each pupil so that skill development and knowledge acquisition occurs at the learners own pace, rather than being seen as a box ticking exercise (Power et al., 2020). Teaching and learning is also encouraged to occur in a cross-curricula nature, where topics are not strictly confined to their AoLE or designated timetable slot, but may be covered throughout the school day wherever the opportunity for learning arises (Welsh Government, 2020b). The nature of this curriculum therefore means that, not only is health and well-being covered significantly in its own dedicated area of learning and experience, but that the wellbeing of the pupil remains a priority throughout their time in education. In addition, under the health and well-being AoLE, schools in Wales are required to teach Relationship and Sexual Education (RSE). The RSE curriculum is based around 3 topics; relationships and identity, sexual health and well-being, and environment, safety and respect. The content of each topic differs appropriately according to maturity (phase 1 is taught from age 3, phase 2 from age 7 and phase 3 from age 11). Furthermore to the enrolment of this well-being-focused curriculum, in 2023 the Welsh Government revealed that the school well-being service, which offers guidance on how to promote the well-being of educators and schools as a whole, was to be allocated an additional £600,000 (Welsh Government, 2023a). The Welsh Government has also produced numerous documents to help guide schools in Wales with their approach to well-being, including a trauma informed schools guidance, a breakdown of how to support pupils with a range of mental illnesses, including anxiety, depression, Post-traumatic stress disorder, and a guide to building

resilience in children and teens (Welsh Government, 2023b). In addition, in 2021 the Welsh Government published a report that advised schools in Wales on how to deliver health and wellbeing education on a whole-school basis. The guidance states that schools should assess the well-being needs of all pupils and seek to deliver well-being education across the school, with additional support being supplied to those who require more intensive interventions (Welsh Government, 2021). This whole-school approach should also be nurtured through the development of a healthy and positive school climate, and supported by strong working bonds between educators, pupils and the community. There is also guidance in the form of self-report checklists to help institutions develop a whole-school approach to mental health and emotional well-being, which encourages the appointment of a health and well-being leader (Public Health Wales, 2022). This highlights even further how Wales as a nation is world leading when it comes to the prioritization and promotion of health and well-being in schools.

The evidence surrounding health and Well-being curricular

Despite Wales undoubtedly providing a more comprehensive set of guidelines about how to teach health and well-being in schools than England, the decision about exactly what to teach is placed in the hands of individual institutions in both nations. This gives schools in both England and Wales the freedom to tailor health and well-being education to the needs of their pupils, provided that it meets the targets set out in their respective curricula. In order to achieve this, many schools choose to subscribe to externally created health and well-being programs, which often include pre-planned lessons and activities. However, with an increasing number of these programs being made available, often at a considerable price, how do educational institutions go about selecting a health and well-being program that will meet the needs of both the national curriculum and their pupils? Current research suggests that educators are more likely to choose interventions based on current trends in health and well-being, personal experience, and the word of others within the profession over scientific evidence (Greany & Brown, 2017; Walker, Nelson & Bradshaw, 2019). This may be due to a number of reasons, such as educators feeling as though their institution did not support literature access or use, not having the necessary time or skillset to pick out valuable information amongst complicated academic text, and feeling as though educational research makes little difference to classroom practice (Bas & Kivilvim, 2017; Gleeson et al., 2022; Hemsley-Brown & Sharp, 2003).

Furthermore, rapid reviews conducted by Mackenzie & Williams (2018), Sancassiani et al. (2015) and Stallard (2013) point to the fact that it can be difficult to examine the evidence surrounding the effectiveness of health and well-being interventions, due to research often yielding inconsistent conclusions. This can lead readers who are unfamiliar with scientific writing open to misinterpreting a research article, especially if they are unable to detect poor quality research with flawed methodological approaches. For example, individual studies have found that CBT (Attwood, Meadows, Stallard & Richardson, 2012; Liddle & Macmillan, 2010) and resilience-based interventions (Rich et al., 2022; Senior et al., 2023) can have a significant, positive impact on pupils mood, anxiety, self-esteem, interpersonal skills and executive functioning, yet systematic reviews of CBT and resilience-based approaches demonstrate that such interventions may produce only weak impacts on outcomes such as child mental well-being, anxiety and depression (Mackenzie & Williams, 2018; Caldwell et al., 2019; Dray et al., 2017). Many of these reviews go on to conclude that research efforts to evaluate health and well-being interventions in UK primary schools must continue, but in a way that ensures research is conducted to a high standard, and considers both fidelity and bias (Mackenzie & Williams, 2018; Dray et al., 2017).

It is also important to consider that the majority of reviews investigating current health and well-being provision were conducted prior to the occurrence of the COVID-19 pandemic. In February 2020, the outbreak of the COVID-19 virus caused widespread closure of schools across the UK, which became mandatory between 23rd March to 1st June 2020, 5th November to 2nd December 2020 and 6th January to 8th March 2021 (UK Parliament, 2021), when periods of national lockdown were enforced. Despite there being some evidence to suggest that health and well-being provision continued during lockdown (Chang et al., 2022), the majority of pupils are likely to have suffered from a lack of, or reduced implementation of, health and wellbeing interventions, at a time when they needed it most. It has been widely speculated that many pupils are likely to suffer losses to their mental well-being brought about by the immense change, anxiety and social isolation induced by the virus, with research efforts investigating the impacts of COVID on children and young people well underway. Evidence has already demonstrated that young people report experiencing higher levels of depression, anxiety and distress post-pandemic compared to pre-pandemic (Elharake, Akbar, Malik, Gilliam & Omer, 2022; Samji et al., 2022), with impacts thought to be even greater amongst those with additional needs such as Autism (Toseeb & Asbury, 2023). As pupils across the UK have now

returned to full-time education since the lifting of the last nationally imposed lockdown in March 2021, there is now a pressing need to provide a comprehensive overview and evaluation of the health and well-being interventions currently used in UK primary schools prior to, during and immediately after the pandemic. This way, efforts can begin to negate the fallout brought about during this tumultuous period when it comes to pupil mental health as effectively and as efficiently as possible.

Despite some evidence to suggest that school-based resilience building interventions may have only a weak impact on student well-being (Dray et al., 2017), since the pandemic, evidence has emerged identifying resilience as a crucial protective factor when it comes to health and well-being (Song et al., 2021). Resilience can be defined as the ability to successfully adapt to changing circumstances, particularly those that induce distress, anxiety or trauma (American Psychological Association, 2014). It has been demonstrated that over the course of the COVID-19 pandemic, those who were more resilient in nature were better protected against anxiety, stress and depression (Belen, 2023; Marchi, Johansson, Sarkadi & Warner, 2021; Tamarit, Del La Barrera, Schoeps, Castro-Calvo & Montoya-Castilla, 2023). Similar findings have demonstrated that psychological flexibility, defined as one's adaptability to contextual changes in a way that continues to serve their long-term goals (Doorley, Goodman, Kelso & Kashdan, 2020), acted as a buffer to lessen some of the negative impacts of COVID-19 on mental well-being (Dawson & Goliiani-Moghaddam, 2020; McCracken, Buhrman, Badinlou & Brocki, 2022; Prudenxi, Graham, Rogerson & O'Connor, 2021). This would suggest that both resilience and psychological flexibility are powerful tools that we can utilize to protect our health and well-being during challenging times. As the effects of the pandemic will no doubt persist well into the future, particularly when it comes to our mental health (Banks, Fancourt & Yu, 2021), finding ways to increase psychological flexibility and resilience, particularly amongst young populations, may be the key to widespread improvements in emotional well-being.

## The Connect curriculum

In order to achieve this amongst children and adolescents, a school-based intervention targeting both the concepts of resilience and psychological flexibility may be particularly effective. One such intervention is Connect. Connect is a recently developed health and well-being PSHE curriculum for 4–11-year-olds, designed by a multidisciplinary team of researchers, educators, and psychologists. The curriculum aims to build and strengthen children's resilience and psychological flexibility through structured lessons and carefully

planned activities (Connect PSHE, 2021). The curriculum encourages learners to engage with its content through the lens of its DNA-V model, which is based on principles of ACT, a CBT-based therapy that encourages psychological flexibility by inviting the individual to embrace negative or difficult thoughts or events, rather than run from or attempt to change them (Hayes, Strosahl & Wilson, 2011). The DNA-V model comprises 4 key components: the Discoverer, the Noticer, the Advisor, and Values. The Discoverer encourages children to develop the skills necessary to explore and investigate their surroundings with curiosity and enthusiasm. The Noticer encourages children to develop the skills necessary to notice and label current experiences. The Advisor encourages children to develop the skills necessary to consider the reasons for supporting and refuting certain actions. The Values element encourages children to identify the qualities they want to reflect and behave in line with these qualities. All 4 of these components are considered flexibly within the context of the induvial and others around them, in a component of the model called ‘self and social’. Research has demonstrated that when pupils are able to develop these skills, they become more resilient in their approach to life (Connect PSHE, 2021).

However, what we currently do not know is how well Connect can be utilized within Wales. The Connect curriculum was designed in England, specifically to meet the needs of the English RSE curriculum (Connect PSHE, 2021), and is increasingly being used in primary schools across England to provide education about health and well-being. There are also currently a small number of schools in Wales that are already implementing the Connect curriculum, and interest across the country is growing. However, previous research has demonstrated that when a health and well-being program is implemented outside of its country of development, it cannot always be presumed that any potential benefits from this program are transferable (Wear & Nind, 2011). This finding may pose a barrier to successfully implementing the Connect program across schools in Wales, as not only was the Connect curriculum developed in England, but as previously stated the education systems in England and Wales are significantly different. This may make it difficult to embed a health and well-being program designed to specifically meet the needs of the English RSE curriculum, to the Welsh curriculum, which has vastly different views about how and where to teach about mental and physical well-being. With the development of the new Welsh curriculum, there are now targets and goals to meet within the health and well-being AoLE. This means that any external PSHE curricula implemented need to meet these targets, so that children gain the skills and knowledge set

out in the Welsh Government legislation. There is therefore a clear need for us to assess the extent to which the Connect Curriculum meets the expectations set out in the health and well-being AoLE.

In addition to this, as Connect is a relatively new curriculum, there is currently little evidence in the form of critical analysis. Although Connect is based on a solid foundation of supporting scientific research, few researchers have carried out an evaluation of the program after an implementation period in schools. Recently, a randomized controlled trial of Connect was undertaken by Nisar et al. (2023), whereby the impact of Connect on primary school pupil's mental well-being was evaluated after receiving the program for 12 weeks. 742 pupils from 20 primary schools in North Wales participated in the trial. The investigation proved successful, with 12 weeks of the Connect program having a small but significant positive impact on the mental well-being of young pupils. Despite this positive result, more research is needed before the use of Connect can be fully endorsed in schools in Wales. In particular, we know little about the views of primary school teachers who have had experience with the Connect curriculum. Research has demonstrated that published studies within the areas of education and health and well-being are often inaccessible to teachers (Gleeson et al., 2022), and therefore they are unlikely to fuel decisions surrounding PSHE program implementation. One way we may be able to alleviate this barrier, so that educators are aware of the effectiveness of current health and well-being programs, may be to centre them directly in the research process. This can be done by conducting interviews either with individual teaching staff or with focus groups, so that their views, opinions and experiences with well-being interventions may be assessed. Alsubaie (2016) states that educator involvement and feedback is essential when it comes to research surrounding curriculum design, and so accessing teachers' perceptions of the Connect program may be crucial in order to further its usefulness and acceptability.

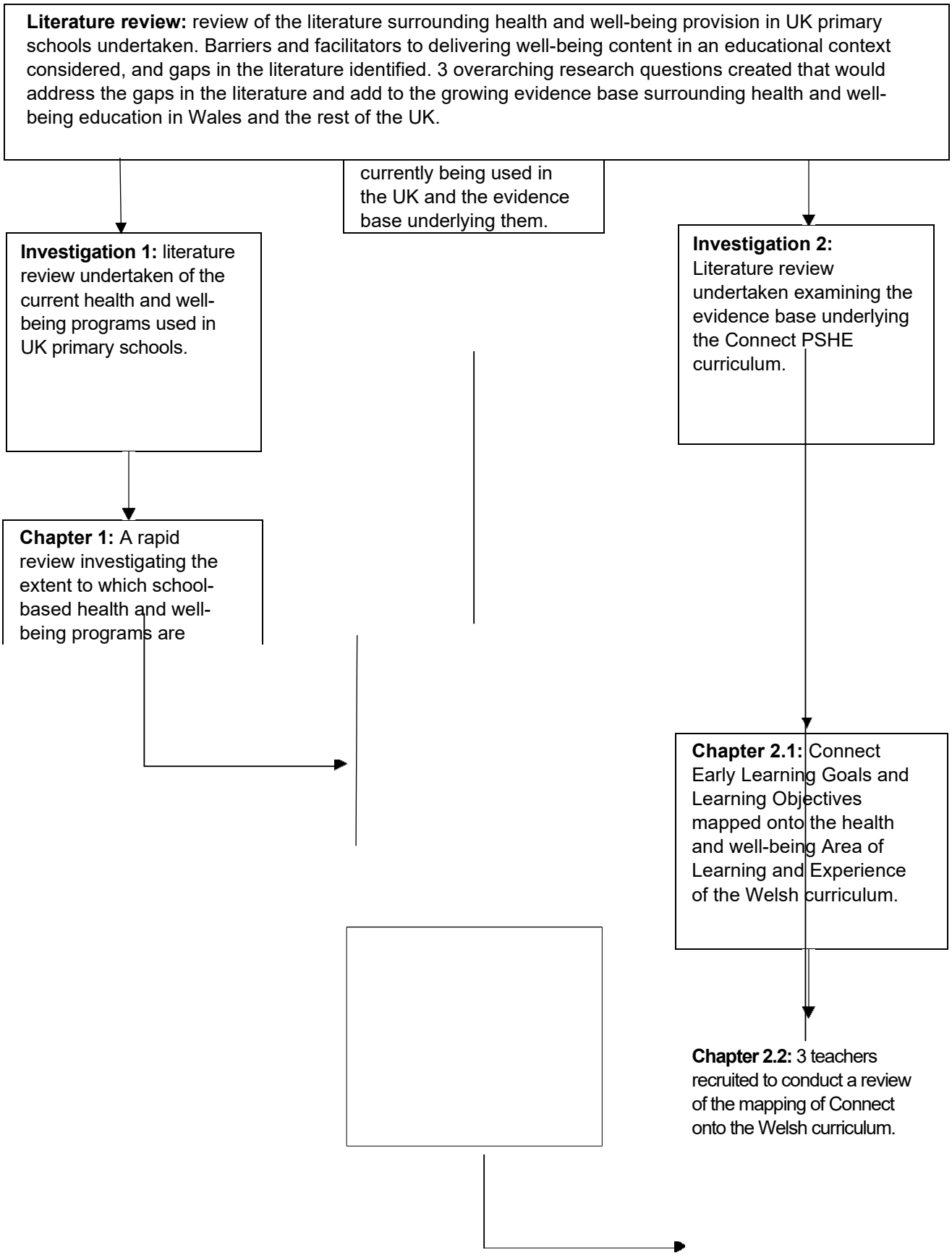
After conducting a thorough literature review of the current issues surrounding the topic of school-based health and well-being interventions in the UK, it was decided that this Masters dissertation would investigate the three following questions;

1. what health and well-being interventions are currently being carried out in UK primary schools, and what is the evidence base for such interventions?
2. How well does the Connect Curriculum map onto the Health and Well-being AoLE, Welsh Curriculum?

3. What are the views, perceptions and experiences of teachers delivering the Connect curriculum to KS2 children in primary school?

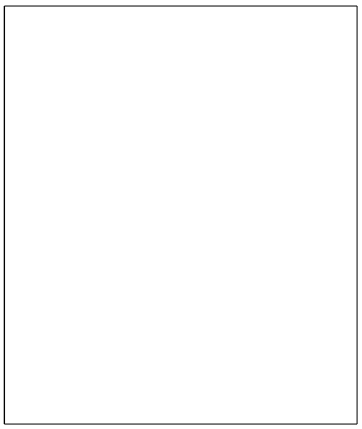
**Figure 1**

*Flow chart demonstrating the process undertaken throughout this master's dissertation.*



**Investigation 3:** literature review of qualitative research examining teachers experiences with school-based health and well-being programs within the UK.

**Chapter 3:** Interviews conducted with 7 teachers who had experience delivering the Connect program, to access their perceptions surrounding the curriculum. Thematic Content Analysis undertaken



## Reference


Agarwal, P., Kaushik, A., Sarkar, S., Rao, D., Mukherjee, N., Bharat, V., ... & Saha, A. K. (2021). Global survey-based assessment of lifestyle changes during the COVID-19 pandemic. *Plos one*, *16*(8), e0255399.

Agnafors, S., Barmark, M., & Sydsjö, G. (2021). Mental health and academic performance: a study on selection and causation effects from childhood to early adulthood. *Social psychiatry and psychiatric epidemiology*, *56*, 857-866.

Alsubaie, M. A. (2016). Curriculum development: Teacher involvement in curriculum development. *Journal of Education and Practice*, *7*(9), 106-107.

American Psychological Association. (2014). *The road to resilience. Washington, DC: American Psychological Association.* Retrieved from http://www.apa.org/helpcenter/road-resilience.aspx

Arango, C., Díaz-Caneja, C. M., McGorry, P. D., Rapoport, J., Sommer, I. E., Vorstman, J. A., ... & Carpenter, W. (2018). Preventive strategies for mental health. *The Lancet Psychiatry*, *5*(7), 591-604.

Attwood, M., Meadows, S., Stallard, P., & Richardson, T. (2012). Universal and targeted computerised cognitive behavioural therapy (Think, Feel, Do) for emotional health in schools: results from two exploratory studies. *Child and Adolescent Mental Health*, *17*(3), 173-178.

Banerjee, R., McLaughlin, C., Cotney, J., Roberts, L., & Peereboom, C. (2016). Promoting emotional health, well-being and resilience in primary schools.

Banks, J., Fancourt, D., & Xu, X. (2021). Mental health and the COVID-19 pandemic. *World happiness report*, *2021*, 107-130.

Bas, G., & Kivilcim, Z. S. (2017). Teachers' Views about Educational Research: A Qualitative Study. *International Journal of Progressive Education*, *13*(2), 60-73.

Belen, H. (2023). A longitudinal examination of the association between fear of COVID-19, resilience, and mental health during COVID-19 outbreak. *Psychology, Health & Medicine*, *28*(1), 253-259.

Bonell, C., Humphrey, N., Fletcher, A., Moore, L., Anderson, R., & Campbell, R. (2014). Why schools should promote students' health and well-being. *Bmj*, *348*.

Caldwell, D. M., Davies, S. R., Hetrick, S. E., Palmer, J. C., Caro, P., López-López, J. A., ... & Welton, N. J. (2019). School-based interventions to prevent anxiety and depression in children and young people: a rapid review and network meta-analysis. *The Lancet Psychiatry*, *6*(12), 1011-1020.

Caldwell, D. M., Davies, S. R., Hetrick, S. E., Palmer, J. C., Caro, P., López-López, J. A., ... & Welton, N. J. (2019). School-based interventions to prevent anxiety and depression in children and young people: a rapid review and network meta-analysis. *The Lancet Psychiatry*, *6*(12), 1011-1020.

Chang, T. F., Ley, B. L., Ramburn, T. T., Srinivasan, S., Hariri, S., Purandare, P., & Subramaniam, B. (2022). Online Isha Upa Yoga for student mental health and well-being during COVID-19: A randomized control trial. *Applied Psychology: Health and Well-Being*, *14*(4), 1408-1428.

Cilar, L., Štiglic, G., Kmetec, S., Barr, O., & Pajnkihar, M. (2020). Effectiveness of school-based mental well-being interventions among adolescents: A rapid review. *Journal of Advanced Nursing*, *76*(8), 2023-2045.

Clarke, A., Sorgenfrei, M., Mulcahy, J., Davie, P., Friedrich, C., & McBride, T. (2021). Adolescent mental health: a rapid review on the effectiveness of school-based interventions. *Early Intervention Foundation*, 1-87.

Connect PSHE (2021). *Our story*. Retrieved from Our Story — Connect PSHE (connect-pshe.org)

Conway, K. P., Swendsen, J., Husky, M. M., He, J. P., & Merikangas, K. R. (2016). Association of lifetime mental disorders and subsequent alcohol and illicit drug use: results from the National Comorbidity Survey–Adolescent Supplement. *Journal of the American Academy of Child & Adolescent Psychiatry*, *55*(4), 280-288.

Coşkun, K. (2019). Evaluation of the socio emotional learning (SEL) activities on self-regulation skills among primary school children.

Darling, S., & Oberklaid, F. (2019, September 16). *Child mental health: building a shared language*. Retrieved from Child mental health: building a shared language | InSight+ (mja.com.au)

Darling, S., Dawson, G., Quach, J., Smith, R., Perkins, A., Connolly, A., ... & Oberklaid, F. (2021). Mental health and well-being coordinators in primary schools to support student mental health: protocol for a quasi-experimental cluster study. *BMC public health*, *21*(1), 1-14.

Dawson, D. L., & Golijani-Moghaddam, N. (2020). COVID-19: Psychological flexibility, coping, mental health, and well-being in the UK during the pandemic. *Journal of contextual behavioral science*, *17*, 126-134.

Department for Education (2010, November). *The Importance of Teaching*. Retrieved from The Importance of Teaching (publishing.service.gov.uk)

Department for Education (2014, December 2). *National curriculum in England*. Retrieved from National curriculum in England: framework for key stages 1 to 4 - GOV.UK (www.gov.uk)

Department for Education (2016, July). *A framework of core content for initial teacher training (ITT).* Retrieved from Independent report template (publishing.service.gov.uk)

Department For Education (2017, December). *Transforming Children and Young **People's Mental Health Provision: a Green Paper***. Retrieved from Transforming_children_and_young_people_s_mental_health_provision.pdf (publishing.service.gov.uk)

Department for Education (2021, September 13). *Personal, Social, Health and Economic (PSHE) Education*. Retrieved from Personal, social, health and economic (PSHE) education - GOV.UK (www.gov.uk)

Department of Education (2018, October). *Mental health and Well-being provision in schools*. Retrieved from Mental health and well-being provision in schools (publishing.service.gov.uk)

Department of Education (2021, March 3). *Children & Young People's Emotional Health and Well-being in Education Framework (Easy Read)*. Retrieved from Children & Young People s Emotional Health and Well-being in Education Framework (Easy Read).PDF (education-ni.gov.uk)

Dodge, R., Daly, A. P., Huyton, J., & Sanders, L. D. (2012). *The challenge of defining well-being*, 2, 222–235.

Doorley, J. D., Goodman, F. R., Kelso, K. C., & Kashdan, T. B. (2020). Psychological flexibility: What we know, what we do not know, and what we think we know. *Social and Personality Psychology Compass*, *14*(12), 1-11

Dray, J., Bowman, J., Campbell, E., Freund, M., Wolfenden, L., Hodder, R. K., ... & Wiggers, J. (2017). Rapid review of universal resilience-focused interventions targeting child and adolescent mental health in the school setting. *Journal of the American Academy of Child & Adolescent Psychiatry*, *56*(10), 813-824.

Egan, M., Daly, M., & Delaney, L. (2015). Childhood psychological distress and youth unemployment: Evidence from two British cohort studies. *Social Science & Medicine*, *124*, 11-17.

Elharake, J. A., Akbar, F., Malik, A. A., Gilliam, W., & Omer, S. B. (2022). Mental health impact of COVID-19 among children and college students: A rapid review. *Child Psychiatry & Human Development*, 1-13.

Evans, G. (2022). Back to the future? Reflections on three phases of education policy reform in Wales and their implications for teachers. *Journal of educational change*, *23*(3), 371-396.

Fenwick-Smith, A., Dahlberg, E. E., & Thompson, S. C. (2018). Rapid review of resilience-enhancing, universal, primary school-based mental health promotion programs. *BMC psychology*, *6*, 1-17.

Gleeson, J., Harris, J., Cutler, B., Rosser, B., Walsh, L., Rickinson, M., ... & Cirkony, C. (2022). School educators' use of research: findings from two large-scale Australian studies. *Research Papers in Education*, 1-25.

Goldberg, J. M., Sklad, M., Elfrink, T. R., Schreurs, K. M., Bohlmeijer, E. T., & Clarke, A. M. (2019). Effectiveness of interventions adopting a whole school approach to enhancing social and emotional development: a meta-analysis. *European Journal of psychology of Education*, *34*, 755-782.

Goodyear-Smith, F., Martel, R., Darragh, M., Warren, J., Thabrew, H., & Clark, T. C. (2017). Screening for risky behaviour and mental health in young people: the YouthCHAT programme. *Public health reviews*, *38*, 1-12.

Greany, T., & Brown, C. (2017). The Evidence Informed School System in England: Where Should School Leaders Be Focusing Their Efforts?. *International Journal of Education Policy and Leadership*, *12*(3), n3.

Groenman, A. P., Janssen, T. W., & Oosterlaan, J. (2017). Childhood psychiatric disorders as risk factor for subsequent substance abuse: a meta-analysis. *Journal of the American Academy of Child & Adolescent Psychiatry*, *56*(7), 556-569.

Hansen, A. S., Telléus, G. K., Mohr-Jensen, C., & Lauritsen, M. B. (2021). Parent-perceived barriers to accessing services for their child's mental health problems. *Child and Adolescent Psychiatry and Mental Health*, *15*, 1-11.

Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (2011). *Acceptance and commitment therapy: The process and practice of mindful change*. Guilford press.

Hemsley-Brown, J., & Sharp, C. (2003). The use of research to improve professional practice: A rapid review of the literature. *Oxford review of education*, *29*(4), 449-471.

Humphrey N. Social and emotional learning: a critical appraisal. SAGE, 2013.

Jones, V. (2023). Environmental Education and the new curriculum for Wales: an evaluation of how a family of schools in a rural area used a Theory of Change approach. *Environmental Education Research*, *29*(3), 392-409.

Kessler, R. C., Amminger, G. P., Aguilar-Gaxiola, S., Alonso, J., Lee, S., & Üstün, T. B. (2007). Age of onset of mental disorders: a review of recent literature. *Current opinion in psychiatry*, *20*(4), 359-364.

Kim, B. E., Gilman, A. B., Kosterman, R., & Hill, K. G. (2019). Longitudinal associations among depression, substance abuse, and crime: A test of competing hypotheses for driving mechanisms. *Journal of criminal justice*, *62*, 50-57.

Knight, L., & Samuel, V. (2022). Acceptance and commitment therapy interventions in secondary schools and their impact on students' mental health and well-being: A rapid review. *Journal of Contextual Behavioral Science*.

Kruger, L. J., Wandle, C., & Struzziero, J. (2007). Coping with the stress of high stakes testing. *Journal of Applied School Psychology*, *23*(2), 109-128.

Langford, R., Bonell, C. P., Jones, H. E., Pouliou, T., Murphy, S. M., Waters, E., ... & Campbell, R. (2014). The WHO Health Promoting School framework for improving the health and well-being of students and their academic achievement. *Cochrane database of rapid reviews*, (4).

Liddle, I., & Macmillan, S. (2010). Evaluating the FRIENDS programme in a Scottish setting. *Educational Psychology in Practice*, *26*(1), 53-67.

Mackenzie, K., & Williams, C. (2018). Universal, school-based interventions to promote mental and emotional well-being: What is being done in the UK and does it work? A rapid review. *BMJ open*, *8*(9), e022560.

March, A., Stapley, E., Hayes, D., Town, R., & Deighton, J. (2022). Barriers and facilitators to sustaining school-based mental health and well-being interventions: a rapid review. *International journal of environmental research and public health*, *19*(6), 3587.

Marchi, J., Johansson, N., Sarkadi, A., & Warner, G. (2021). The impact of the COVID-19 pandemic and societal infection control measures on children and adolescents' mental health: A scoping review. *Frontiers in Psychiatry*, *12*, 711791.

Mayo Clinic (2023). *Mental illness in children: Know the signs*. Retrieved from Mental illness in children: Know the signs - Mayo Clinic

McCracken, L. M., Buhrman, M., Badinlou, F., & Brocki, K. C. (2022). Health, well-being, and persisting symptoms in the pandemic: What is the role of

psychological flexibility?. *Journal of contextual behavioral science*, *26*, 187-192.

McGorry, P., Bates, T., & Birchwood, M. (2013). Designing youth mental health services for the 21st century: examples from Australia, Ireland and the UK. *The British Journal of Psychiatry*, *202*(s54), s30-s35.

Murano, D., Sawyer, J. E., & Lipnevich, A. A. (2020). A meta-analytic review of preschool social and emotional learning interventions. *Review of Educational Research*, *90*(2), 227-263.

National Foundation for Educational Research (2019, December 3). *Achievement of 15-Year Olds in Wales: PISA 2018 National Report*. Retrieved from Achievement of 15-Year Olds in Wales: PISA 2018 National Report - NFER

Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental health of young people: a global public-health challenge. *The Lancet*, *369*(9569), 1302-1313.

Power, S., Newton, N., & Taylor, C. (2020). 'Successful futures' for all in Wales? The challenges of curriculum reform for addressing educational inequalities. *The curriculum journal*, *31*(2), 317-333.

Prudenzi, A., Graham, C. D., Rogerson, O., & O'Connor, D. B. (2021). Mental health during the COVID-19 pandemic: exploring the role of psychological flexibility and stress-related variables. *Psychology & Health*, 1-24.

PSHE Association (2013, February). *Comments on the national curriculum proposals published in February 2013 from the PSHE education strategic partners' group.* Retrieved from file:///C:/Private/Downloads/PSHE-StratGroup-commentsNC.pdf.

PSHE Association (2021). *Health and Well-being in Wales.* Retrieved from Health and Well-being in Wales (pshe-association.org.uk)

PSHE Association (2023). *Health and Well-being education in Scotland*. Retrieved from Health and Well-being education in Scotland (pshe-association.org.uk)

Public Health Wales (2022, September). *Whole School Approach to Emotional and Mental Well-being: Self-Evaluation Tool*. Retrieved from WSAEMWB SET. 2022. V2.docx (live.com)

Pulimeno, M., Piscitelli, P., Colazzo, S., Colao, A., & Miani, A. (2020). School as ideal setting to promote health and well-being among young people. *Health promotion perspectives*, *10*(4), 316.

Reynolds, D. (2008). New Labour, education and Wales: the devolution decade. *Oxford review of education*, *34*(6), 753-765.

Rice, F., Rawal, A., Riglin, L., Lewis, G., Lewis, G., & Dunsmuir, S. (2015). Examining reward-seeking, negative self-beliefs and over-general autobiographical memory as mechanisms of change in classroom prevention programs for adolescent depression. *Journal of affective disorders*, *186*, 320-327.

Rich, B. A., Starin, N. S., Senior, C. J., Zarger, M. M., Cummings, C. M., Collado, A., & Alvord, M. K. (2022). Improved resilience and academics following a school-based resilience intervention: A randomized controlled trial. *Evidence-Based Practice in Child and Adolescent Mental Health*, 1-17.

Roffey, S., Williams, A., Greig, A., & MacKay, T. A. W. N. (2016). Mental health and well-being in schools: Concerns, challenges and opportunities. *Educational and child Psychology*, *33*(4), 5-7.

Ross, D. A., Hinton, R., Melles-Brewer, M., Engel, D., Zeck, W., Fagan, L., ... & Mohan, A. (2020). Adolescent well-being: A definition and conceptual framework. *Journal of Adolescent Health*, *67*(4), 472-476.

Sadler, K., Vizard, T., Ford, T., Marchesell, F., Pearce, N., Mandalia, D., ... & McManus, S. (2018). Mental health of children and young people in England, 2017.

Samji, H., Wu, J., Ladak, A., Vossen, C., Stewart, E., Dove, N., ... & Snell, G. (2022). Mental health impacts of the COVID-19 pandemic on children and youth–a rapid review. *Child and adolescent mental health*, *27*(2), 173-189.

Sancassiani, F., Pintus, E., Holte, A., Paulus, P., Moro, M. F., Cossu, G., ... & Lindert, J. (2015). Enhancing the emotional and social skills of the youth to promote their well-being and positive development: a rapid review of universal school-based randomized controlled trials. *Clinical practice and epidemiology in mental health: CP & EMH*, *11*(Suppl 1 M2), 21.

Senior, C. J., Godovich, S. A., Shiffrin, N. D., Cummings, C. M., Alvord, M. K., & Rich, B. A. (2023). The Effects of a School-based Resilience Intervention for Youth with Socioemotional Difficulties. *Journal of Child and Family Studies*, *32*(2), 384-397.

Soneson, E., Howarth, E., Ford, T., Humphrey, A., Jones, P. B., Thompson Coon, J., ... & Anderson, J. K. (2020). Feasibility of school-based identification of children and adolescents experiencing, or at-risk of developing, mental health difficulties: a systematic review. *Prevention science*, *21*, 581-603.

Song, S., Yang, X., Yang, H., Zhou, P., Ma, H., Teng, C., ... & Zhang, N. (2021). Psychological resilience as a protective factor for depression and anxiety among the public during the outbreak of COVID-19. *Frontiers in psychology*, *11*, 618509.

Spector, A., Orrell, M., Lattimer, M., Hoe, J., King, M., Harwood, K., ... & Charlesworth, G. (2012). Cognitive behavioural therapy (CBT) for anxiety in people with dementia: study protocol for a randomised controlled trial. *Trials*, *13*(1), 1-7.

Stallard, P. (2013). School-based interventions for depression and anxiety in children and adolescents. *BMJ Ment Health*, *16*(3), 60-61.

Tamarit, A., De la Barrera, U., Schoeps, K., Castro-Calvo, J., & Montoya-Castilla, I. (2023). Analyzing the role of resilience and life satisfaction as mediators of the impact of COVID-19 worries on mental health. *Journal of Community Psychology*, *51*(1), 234-250.

Thorisdottir, I. E., Asgeirsdottir, B. B., Kristjansson, A. L., Valdimarsdottir, H. B., Tolgyes, E. M. J., Sigfusson, J., ... & Halldorsdottir, T. (2021). Depressive symptoms, mental well-being, and substance use among adolescents before and during the COVID-19 pandemic in Iceland: a longitudinal, population-based study. *The Lancet Psychiatry*, *8*(8), 663-672.

Tomé, G., Almeida, A., Ramiro, L., & Gaspar, T. (2021). Intervention in schools promoting mental health and well-being: a rapid. *Global Journal of Community Psychology Practice*, *12*(1).

Toseeb, U., & Asbury, K. (2023). A longitudinal study of the mental health of autistic children and adolescents and their parents during COVID-19: Part 1, quantitative findings. *Autism*, *27*(1), 105-116.

UK parliament (2021, December 22). Coronavirus: *A history of English lockdown laws*. Retrieved from Coronavirus: A history of English lockdown laws - House of Commons Library (parliament.uk)

United Nations, 2015. *Transforming Our World: The 2030 Agenda for Sustainable Development*. New York: UN Publishing.

Walker, M., Nelson, J., & Bradshaw, S. (2019). Teachers' Engagement with Research: What Do We Know? A Research Briefing. *Education Endowment Foundation*.

Weare, K., & Nind, M. (2011). Mental health promotion and problem prevention in schools: what does the evidence say?. *Health promotion international*, *26*(suppl_1), i29-i69.

Welsh Government (2020a). *Curriculum for Wales*. Retrieved from Curriculum for Wales - Hwb (gov.wales)

Welsh Government (2020b). *Health and Well-being*. Retrieved from Health and Well-being: Introduction - Hwb (gov.wales)

Welsh Government (2021, March 15). *Framework on embedding a whole-school approach to emotional and mental well-being.* Retrieved from WG42005 (gov.wales)

Welsh Government (2023a, January 24). *School Well-being Service extended as part of £600k funding package*. Retrieved from School Well-being Service extended as part of £600k funding package | GOV.WALES

Welsh Government (2023b). *Mental health and Well-being: 8 to 12 years*. Retrieved from Mental health and well-being: 8 to 12 years | GOV.WALES

Western, M., & Tomaszewski, W. (2016). Subjective well-being, objective well-being and inequality in Australia. *PloS one*, *11*(10), e0163345.

Wigelsworth, M., Verity, L., Mason, C., Qualter, P., & Humphrey, N. (2022). Social and emotional learning in primary schools: A review of the current state of evidence. *British Journal of Educational Psychology*, *92*(3), 898-924.

Wong, A. S., Li-Tsang, C. W., & Siu, A. M. (2014). Effect of a social emotional learning

programme for primary school pupils. *Hong Kong Journal of Occupational Therapy*, *24*(2), 56-63.

World Health Organisation. Basic documents (forty-first edition) including amendments adopted up to 31 October 1996. Geneva: WHO; 1996. Constitution of the World Health Organisation.

World Health Organization (2013, January 6). *Mental health action plan 2013-2020*. Retrieved from Mental health action plan 2013 - 2020 (who.int)

## Chapter 2: Rapid review of the evidence-base for current Health and Wellbeing interventions in UK primary schools

### Literature review

#### The global mental health crisis

The worsening mental health crisis faced by children in the UK has garnered growing attention in recent years. Evidence indicates that mental health problems are emerging at an increasingly earlier age in young people. In England, the prevalence of mental disorders has increased amongst young people aged 5-16 from 1 in 9 children in 2017, to 1 in 6 children in 2020 (NHS Digital, 2020). Similarly in Wales, it has been reported that 1 in 10 children experience some form of mental illness, and fear judgement and isolation from their peers due to the stigma surrounding mental health (National Assembly for Wales, 2018). In addition, the impact of the COVID-19 pandemic and the associated life-style changes related to lockdown restrictions have had significant negative effects on the mental health of billions of people worldwide (Agarwal et al., 2021). The pandemic appears to have had a disproportionately negative impact on the mental well-being of young people (Kooth, 2020), with children and adolescents reporting greater levels of depression, anxiety and distress both during (Kumar & Nayar, 2021) and after COVID-19 (Kauhanen et al., 2022). As the devastating impacts the virus has exerted onto the mental well-being of young people in the UK are likely to persist well into the future (Banks, Fancourt & Xu, 2021), research investigating current health and well-being provision in UK schools is paramount, so we can begin to address how we can effectively respond to both the fallout from the pandemic and the growing mental health crisis.

Mental health difficulties are often carried into adult life (Kendall, Safford, Flannery-Schroeder & Webb, 2004) and can have long-lasting consequences, such as poor quality of life, poor academic attainment, drug and alcohol use, and greater risk of self-harm and suicide (Belfer, 2008; Collins & Dozois, 2008; Patel, Flisher, Hetrick & McGorry, 2007; webster-stratton, 2011). There are also significant economic implications, with the cost of mental health problems as high as £117 billion a year in the UK and costing the Welsh economy £4.8 billion per year (Mental Health Foundation, 2022). Despite this, it has been reported that three quarters of children experiencing mental illness do not receive support from service providers (Kelvin, 2014). In addition, as it is thought that over 50% of mental health difficulties develop during the years spent in education (Belfer, 2008), it is vital that

schools offer support to their struggling pupils. However, a report from the National Assembly for Wales (2018) accessed the thoughts and opinions of 1611 young people across schools in Wales concerning the support available to them when it came to their mental well-being, and revealed that while some services are available to support young pupils who experience significant challenges to their mental health, such as CAMHS, limited support is available for the whole student population, or those presenting with lower-level difficulties. Furthermore, 65% of pupils reported that they would like their school to teach more about mental well-being, with the 19% of pupils who had accessed school mental health services stating that provisions were 'nowhere near enough'. (National Assembly for Wales, 2018). This lack of accessible support highlights a clear need for educational institutions to teach children the skills necessary to protect them from poor mental well-being.

Health and Well-being provision in schools

Schools across the UK have a responsibility to ensure that they educate pupils about health and well-being (Guva & Hylander, 2012). In England, Personal, Social, Health and Economic education (PSHE) is not mandatory, but health and well-being is taught through the compulsory RSE curriculum, which covers physical health and mental well-being (Department for Education, 2019). In Scotland, the curriculum is divided into 6 key learning areas. One such learning area is entitled mental, emotional, social and physical well-being, through which children are taught about how to take care of their bodies, by eating a nutrient rich diet and by engaging in physical activity and practicing good hygiene, and about their emotional and mental well-being (PSHE association, 2021). Similarly, schools across Northern Ireland have developed an educational framework to teach pupils about emotional well-being in a comprehensive manner. This framework is delivered to pupils based on a tiered system, where tier 1 involves delivering health and well-being education across whole cohorts of pupils, tier 2 involves delivering well-being education to smaller groups of pupils who require targeted support, and tier 3 involves delivering specialist treatment or intervention to at risk pupils in a one-to-one capacity (Department of Education, 2021).

In Wales, the Curriculum for Wales is committed to ensuring that health and well-being education is at the heart of all schools across the country. In 2015, Wales became a

world leading nation when it developed the Well-being of Future Generations Act (Future Generations Commissioner for Wales, 2015). The purpose of the act is to encourage public powers in Wales to work cohesively, in a community driven manner to achieve the 7 key goals set out in the document that seek to protect the long-term economic, environmental and social well-being of Wales for future generations (Welsh Government, 2015). One of the goals, ‘a healthier Wales’ seeks to improve the physical, social and emotional health of its citizens. In 2022, the curriculum for Wales (Welsh Government, 2020a) came into practice, which embodies the goals of the Future Generations of Wales Act. Within this revolutionary new curriculum, core subjects have been organized around 6 areas of learning and experience (AoLEs), one of which is health and well-being. This unit is a holistic and comprehensive approach to health and well-being that aims to support pupils to be motivated, resilient, empathetic and informed individuals by educating them about physical health and development, mental health, and emotional and social well-being (Welsh Government, 2020b).

As schools strive to meet the goals set out in the new policies of both the Curriculum for Wales and the Well-being of Future Generations Act, many educational institutions will be exploring new ways to implement health and wellbeing educational content or revising already established health and well-being curricula. Across the UK, schools have the power to decide how to deliver health and well-being educational content, as long as this content meets the requirements of the national curriculum. Many will do this via health and well-being interventions designed by external professionals. There are several reasons why schools are the perfect medium through which health and well-being interventions can be delivered. Both Greenberg (2010) and Humphrey et al. (2016) have reported that school-based interventions are able to reach vast populations of young pupils from a range of different backgrounds, many of whom would not receive health and well-being support elsewhere. Furthermore, when health and well-being interventions are embedded across the whole school, they have the power to reduce the stigma attached to seeking out support for mental illness (Fadus & Harrison, 2019), and allow staff to keep a close eye on the emotional states of pupils on a day-by-day basis due to the majority of children spending large amounts of time with school staff (Tomé, Almeida, Ramiro & Gaspar, 2021).

Evidence surrounding school-based health and well-being programs

Numerous school-based evaluations of health and well-being programs have been conducted, and report a range of positive outcomes, such as increases in socio-emotional development, self-awareness, problem solving, academic attainment, and mental well-being (Barry, Clarke & Dowling, 2017; Durlak, Weissberg, Dymnicki, Taylor & Schellinger, 2011; Wells, Barlow & Stuart-Brown, 2003; Weare & Nind, 2011). However, there are only a few systematic reviews that exist that evaluate the health and well-being interventions used in UK schools. Mackenzie and Williams (2018) conducted a systematic review of UK school-based health and well-being interventions and found that overall, current health and wellbeing programs are able to exert small but positive impacts on student's anxiety levels. Similarly, Caldwell et al. (2019) found that there is some support, albeit weak, for CBT school-based interventions when it comes to reducing anxiety in young learners. Finally, a systematic review, conducted by the Early Intervention Foundation (EIF), of the most widely used interventions in the UK, CBT and SEL, demonstrated that such programs can improve the mood and anxiety of young learners in the short-term, as well as their socio-emotional skill development (Clarke et al., 2021). In addition, research investigating common themes across the most promising health and well-being programs concluded that successful health and well-being interventions tend to be school based, promote the development of key skills, and are enjoyable and capture the attention of both staff and pupils (Robson et al., 2019).

The results from these UK-based rapid reviews are largely in line with reviews conducted internationally. For example, Werner-Seidler et al. (2021) report that school-based health and well-being interventions can have a small but positive impact on the mood and anxiety levels of international pupils. Fenwick-Smith et al. (2018) reported that the reviewed international health and well-being programs were effective in improving the resilience and active coping of young learners, but that most studies failed to report follow up analyses, meaning we do not know whether these effects were maintained. Furthermore, Dray et al., (2017) found that CBT based interventions that are delivered in a school-wide manner hold the most promise when reducing the anxiety levels of children. Similarly, Johnstone, Kemps and Chen (2018) conducted a review of universal school-based interventions and

found that the majority of interventions were able to successfully prevent occurrences of low mood, but not anxiety, and that programs that were longer in nature, such as the CBT based FRIENDS program, were effective in reducing both anxiety and low mood.

However, Mackenzie and Williams (2018) report that many reviews investigating health and well-being programs have highlighted the inconsistent nature of the efficacy of such interventions and have also called attention to the flawed methodology present in many studies. For example, many investigations consistently lack control groups, have low statistical power, small effect sizes, and either fail to report, or report poor intervention fidelity (Durlak et al., 2011; Stallard, 2013; Stallard et al., 2014). Furthermore, it has been reported that in over 50% of the existing literature, studies have involved the developers of the interventions being evaluated, which can result in exaggerated intervention effects, through bias or more effective program execution (Eisner, 2009; Wigelsworth et al., 2016). More importantly, there are even fewer high quality intervention evaluations for school-based health and well-being programs in the UK. While there is a wealth of literature exploring the effectiveness of school-based interventions in countries such as the US and Australia (Mackenzie & Williams, 2018), we cannot necessarily generalize these same interventions to the UK, and expect similar outcomes (Weare & Nind, 2011). While there have been cases of well-being interventions undergoing cultural adaptation to better fit the needs of different countries (Inam, Tariqn & Zaman, 2015), these adaptations do not always take place before an intervention is applied within a different context, and when they do, changes are often shallow and non-significant (Humphrey et al., 2016). This presents a challenge because interventions applied outside of their country of origin often experience a reduction in efficacy due to local contextual factors (Wigglesworth et al., 2016). There is therefore a clear need to provide a comprehensive review of the availability and evidence-base of health and well-being interventions explicitly developed and utilized within the UK.

## Universal vs targeted interventions

In addition to the lack of empirical research evaluating health and well-being interventions, educational institutions in the UK must also navigate the often-conflicting reports concerning what is considered optimal intervention delivery. Numerous factors must be considered, including who will receive the intervention. There are generally two

types of school-based intervention in the UK: universal programs, where interventions are received by all pupils (Durlak et al., 2011), and targeted programs, where a group of pupils with socio-emotional difficulties are selected to receive interventions (Payton et al., 2008). It has been reported that universal health and well-being interventions that are embedded within the curriculum, and endorsed by the whole school, are more effective (Mackenzie & Williams, 2018), and are more likely to produce long-lasting impacts (Adi, Killoran, Janmohamed & Stewart-Brown, 2007; Weare & Nind, 2011). This may be because universal interventions tend to be more comprehensive and non-discriminatory (Humphrey, 2013; Stallard et al., 2012), and offer up opportunities to integrate school-based skills with intervention strategies, to tackle multiple areas of health and well-being (Domitrovich et al., 2010). This is particularly important when we consider that children who suffer with their mental well-being often experience multiple mental health problems simultaneously (Copeland, Shanahan, Costello & Angold, 2009).

However, integrating universal interventions within school contexts is often challenging (Barry, Clarke & Dowling, 2017), as many schools lack the necessary resources, staff and support systems needed to carry out interventions effectively (Jones & Bouffard, 2012). As teachers, who are already balancing a multitude of other educational responsibilities and are often pressured to deliver impressive results when it comes to mathematics, science, and literacy, are often the ones implementing universal school-based health and well-being interventions, program delivery often ends up competing with more ‘core’ subjects for a place in the curriculum (Barry, Clarke & Dowling, 2017). Failure to deliver whole-school interventions consistently, in a robust manner is believed to be the reason why many universal well-being programs produce unsatisfactory outcomes (Durlak et al., 2011; Wilson & Lipsey, 2007), and why targeted interventions are considered by some practitioners to be more fruitful (Mackenzie & Williams, 2018; Payton et al., 2008). Targeted intervention programs allow greater one-to-one interaction between a child and the intervention lead, and allow any adjustments based on the needs of the Individual child to be made, meaning the child can focus more on developing the skills they may lack (Williams, Bywater, Lane, Williams & Hutchings, 2019). Furthermore, there is some evidence to suggest that targeted CBT interventions can produce more long-lasting impacts when it comes to improving depression levels amongst young learners compared to universal interventions (Clarke et al., 2021). However, such interventions are limited by their lack of reach, because they are only delivered to a select few pupils

deemed at risk, rather than an entire year group. As it can be difficult to identify signs of poor mental well-being in young pupils (Soneson et al., 2020), it may mean that when schools select pupils to receive targeted support, many eligible pupils slip through the net and thus do not benefit from the help available. This is not a challenge faced by universal wellbeing interventions, as all pupils receive support and education about their mental well-being at the same level.

School staff vs external practitioners

Further, schools must also carefully consider who will lead such interventions, as this decision will impact their effectiveness, and how likely they are to be implemented long-term (Stallard et al., 2014). Health practitioners and child psychologists undoubtedly have more experience with the models and theoretical underpinnings of the health and well-being domain (Miller & Jome, 2010). In contrast, school staff may not have the sufficient knowledge regarding children's mental health and well-being needed to successfully implement school-based interventions (Headley & Campbell, 2011; Molins & Clopton, 2002). For example, it has been reported by the Department for Education (2017) that over 30% of teachers in England felt unprepared to support students who struggle with their emotional well-being. In addition, as teachers often have incredibly high workloads (Saloviita & Pakarinen, 2021), they may not have the capacity to deliver health and well-being programs consistently, in a way that comprehensively covers the entire curriculum due to time constraints. On the other hand, external mental health professionals and program developers can be hired specifically with the purpose of delivering health and well-being content, and so are less likely to face time pressure due to competing demands, and may be more likely to be able to dedicate more time to thoroughly embed an intervention throughout the school. However, the cost of employing a psychologist or practitioner-led intervention within schools is inevitably higher than employing a school staff-led intervention (Williams et al., 2019), and so may not be feasible for schools with budget restrictions and fewer resources.

In addition, school staff have likely already developed positive relationships with the pupils receiving school-based interventions, and will be more knowledgeable about their behavior, routines, and skillsets. Further, as school staff-led interventions are likely more cost-effective, there is a greater probability that any intervention implemented will become

a permanent fixture within the curriculum (Collins, Woolfson & Durkin, 2014). Furthermore, in 2017 England published its 'Transforming children and young people's mental health provision: a green paper' (Department of Education, 2017) and in 2020, Wales created a new ALN (Additional Learning Needs) act (Welsh Government, 2022). The first document proposed several key targets, one of which was to support all schools in the identification of a health and well-being lead. the second document requires every school in Wales to have an acting ALN co-ordinator (ALNco), who is responsible for ensuring all pupils with ALN have their learning and social needs met. If teachers struggle to implement school-based health and well-being interventions due to a lack of time, capacity and knowledge about children's mental well-being, then they may benefit from the support of an individual who can advise them about effective intervention delivery. Both the health and well-being lead and the ALNco are designated individuals who may be ideal candidates to lead or advise other school staff members about matters relating to health and well-being, meaning that teachers or support staff would be better prepared to deliver well-being interventions successfully.

## Intervention fidelity

Another important factor to consider is intervention fidelity. Intervention fidelity is defined as the extent to which an intervention is carried out according to the guidance of the intervention developers (Carroll et al., 2007), without which we cannot be sure that any outcomes are due to the impact of the intervention, rather than differences in the way the intervention lead carried out the program (Borrelli, 2011). Both Clarke, Bunting and Barry (2014) and Mackenzie and Williams (2018) have demonstrated that high fidelity is associated with more positive outcomes, although other researchers have reported that intervention fidelity has no impact on intervention outcomes (Berry et al., 2016). However, this latter finding may be due to a flawed methodology process. Toomey et al. (2020) points out that many studies either fail to report on intervention fidelity, or use poor assessment tools, such as self-reports, which may give way to social desirability and 'self-reflective blind spots' (Clarke, Bunting & Barry, 2014). It is also thought that issues with implementation fidelity are more apparent when interventions are led by educators and school staff (Mackenzie & Williams, 2018; Stallard et al., 2014). For this reason, it is paramount that health and well-being interventions being carried out at a primary school level consider intervention fidelity, particularly when the intervention is staff-led, to ensure

that any deviation from structured activities and scripts does not impact the intervention being carried out. As the literature surrounding both intervention targets and leads is inconsistent, it can be very difficult for schools to know which route to take. Information regarding such implementation factors needs to be reviewed and considered carefully before being presented in a clear and concise manner, so that teaching staff can make evidence-informed choices about which intervention and route of implementation is the best fit for their institution. However, comprehensive reviews that take these factors into consideration are sparse.

Accessibility of evidence

Recent research has also called attention to the fact that even when evidence about school-based mental health programs is available, it is often not engaged with effectively, and therefore fails to inform educators about the benefits and costs of the interventions they may be implementing (Pegram, Watkins, Hoerger & Hughes, 2022; See & Gorard, 2020). A number of reviews have highlighted that deficits in teaching staff time and availability, research literacy skills, dismissive attitudes towards educational research and scarcity of well evidenced, pertinent, and accessible literature all present consistent obstacles that need to be overcome if educational research is going to meaningfully inform policy and practice (Cain, 2016; Hemsley-Brown & Sharp, 2003; Van Schaik, Volman, Admiraal & Schenke, 2018; Walker, Nelson, Bradshaw & Brown, 2019). Additional factors impeding the use of evidence informed practices include the fact that literature reviews are often inconclusive, difficult to follow, and contradictory in nature (Broekkamp & van Hout-Wolters, 2007), and in addition, often fail to include details that are crucial to educational staff, such as if a program is going to be effective within certain contexts, with certain pupils, and with the resources available to them (Pegram et al., 2022). These reasons mean that for many educational bodies, making a decision about which health and well-being program to implement can be difficult, and may result in practitioners selecting a program with a poor evidence base and methodological flaws (See, 2018). It is therefore essential that researchers produce high quality evidence that is ecologically valid, relevant, and comprehensive, and takes into consideration a wide array of factors including differing program types and intervention techniques. Such literature must be upfront about the various strengths and limitations of both the interventions and research alike, and must be presented in a logical, easy to read format that affords school executives the access they

need to make firm decisions about implementing an intervention that is the right fit for their school and pupils, and does not come at a cost to the time and workload of their staff (Bryman, Becker & Sempik, 2008; Nelson & Campbell, 2017; Slavin, 2017). It is also important that this information, which is typically disseminated within scientific research journals, is shared with teachers more widely so that they have access to the information.

This rapid review aims to provide a comprehensive overview of the health and well-being interventions currently available in UK primary schools and evaluate both their effectiveness and the strength of their evidence base, taking into consideration several factors that are crucial to delivery and impact. There are 3 prominent recent systematic reviews that have conducted similar investigations, however, there are several differences between these 3 reviews and the current research investigation. Mackenzie and Williams (2018) investigated UK health and well-being interventions conducted in both primary and secondary schools, that were universal in nature, took place in mainstream institutions and only included studies that adopted a pre-post test design. Studies were included from the year 2000 to 2016 only. Caldwell et al., (2017) again looked at health and well-being interventions conducted in primary and secondary settings, and included interventions that targeted physical as well as mental health, that assessed the outcome on pupils depression and anxiety levels only, excluding those that looked at impacts on stress or emotional well-being. Further, the review only included studies that were randomized or quasi-randomized in terms of their methodology. Clarke et al., (2021) investigated health and well-being interventions in secondary school settings only, included only randomized and pre-post test designs, and excluded those that did not include a control condition or that were conducted in a primary school. All three reviews excluded studies that were purely qualitative. The current research aims to build on the previous systematic reviews that have been conducted by providing an updated catalogue of interventions, that includes studies published from 2000 to 2020. It also aims to provide a wider scope of the literature by examining a broad range studies, including those that are mixed methods and purely qualitative in nature and those that examine the impact of an intervention on a range of health and well-being outcomes.

Furthermore, all 3 existing UK-based systematic reviews utilized narrow inclusion criteria in terms of study design, only including studies that were pre-posttest design, randomized or quasi-randomized in nature. Reeves (2006) points to the fact that

when researchers place too great an emphasis on ‘gold standard’ research designs, such as randomized control trials, they may fail to consider the important scientific contributions of other research methods, particularly the vitally important initial stages of research, such as pilot studies. For this reason the researcher sought to include a wide range of research designs to provide an overview of a broader scope of research. Further, the researcher decided to provide an overview of the research currently available concerning two factors crucial to successful intervention delivery; who is best to lead health and well-being interventions, and who are best suited to receive them. Finally, the researcher decided to focus on providing a comprehensive review of interventions implemented at the primary level only. This decision was made based on the research available surrounding early intervention, where it has been demonstrated that when practitioners are able to support the emotional and psychological development of young children from an early age, they are more likely to grow into resilient adults, who are better protected against mental illness (Welsh Government, 2021). Early intervention may therefore be the most promising way in which we can tackle the growing mental health crisis, leading to the researcher seeking to provide an overview of the interventions currently available at a primary school level in order to assess how health and well-being provision needs to evolve during such a critical life stage; childhood.

In the wake of the COVID-19 pandemic, an updated inventory of current health and well-being interventions currently being carried out is crucial, as many educational institutions will look to research to guide how to best support their pupils’ mental well-being, which has undoubtedly taken a blow in the face of such a global crisis. This review therefore aims to investigate the following questions:

1. What health and well-being interventions are currently being carried out in UK primary schools?
2. Based on the Downs and Black (1998) checklist, what is the evidence base for these interventions?
3. Is it best to deliver health and well-being programs in a universal or targeted manner?
4. Who are best suited to deliver school-based health and well-being interventions: school staff or external mental health professionals?

## Methods

### Search procedure

Online databases were searched between the months of March and June 2022. This literature search was conducted through three main databases; ProQuest, EBSCOhost, and web of Science. The search term utilized was '(health OR well-being) AND intervention AND ("primary school*" OR "foundation phase" OR "key stage 1" OR "key stage one" OR "key stage 2" OR "key stage two") AND ("united Kingdom" OR scot* OR engl* OR "northern Ir*" OR wales OR welsh OR "great britain")'. Based on results retrieval, key words and phrases were added or removed from search terms to increase or decrease the scope of literature found where necessary. Several rapid reviews resulted from these search terms, and where relevant, the reference lists were searched, and additional papers were found.

### Study selection

### Inclusion criteria:

The researcher made the decision to keep the inclusion criteria for the rapid review purposefully broad. This decision was justified by the acknowledgement in the literature that it can be difficult to conduct rigorous, high-quality research, such as Randomized Control Trials (RCTs), in primary school settings (Mackenzie & Williams, 2018) due to lack of time or availability of pupils to take part in research as participants (Alibali & Nathan, 2010), and due to challenges such as contamination issues (Hutchings et al., 2007). Furthermore, it has been demonstrated that too great a focus on RCTs can result in researchers failing to consider the wider picture within the literature, where important research resulting from earlier exploratory stages is disregarded (Reeves, 2006). The researcher therefore included a broad range of research designs and methodologies in order to provide an accurate depiction of as many UK wide school-based health and well-being interventions as possible. As such broad inclusion criteria were utilized, the researcher ensured that the quality of each study was assessed using the Downs and Black checklist (Downs & Black, 1998) (appendix 1). The inclusion criteria were as follows: studies that were published in a peer-reviewed journal between the years of 2000 and 2022 in the English language, studies that included an intervention that targeted the mental or emotional well-being of pupils and assessed the impact of the intervention on pupils or teaching staff, studies that were published in a UK country, studies that were

conducted in a mainstream, additional needs, independent or specialist primary school, studies that included an intervention that was delivered in a universal or targeted capacity, studies that were quantitative, qualitative or mixed methods in nature, and studies that were pre-post-test design and those that were not.

Exclusion criteria:

The exclusion criteria were as follows; the study did not include an intervention that targeted the mental or emotional well-being of pupils, the study was published outside of the UK, the study was conducted in a secondary school, college, or University.

Data screening and extraction:

When screening and extracting papers, duplicates were removed. Paper titles and abstracts were screened to ensure they were relevant, and if they met the inclusion criteria, full papers were obtained. The reference lists of full papers were also examined, as well as papers citing relevant references. A total of 519 papers were sourced from the literature search. After duplicate papers were removed, 379 studies remained, and their titles or abstracts were screened. This led to the exclusion of 216 studies, meaning 163 studies remained and were examined in full. Of these 138 were excluded due to not meeting the inclusion criteria, meaning that a total of 25 studies were included in the rapid review.

Quality assessment

To determine the quality of each of the studies included in the rapid review, we utilized the Downs and Black checklist (Downs & Black, 1998). This tool is used to establish the validity and power of each eligible study and was chosen because of its prominent use in the area of health and well-being research along with its ability to determine the quality of both RCT and non-RCT studies (Mackenzie & Williams, 2018). The checklist has been found to have good test-retest reliability (r=.88), inter-rater reliability (r=.75) and criterion validity (.90) (Downs & Black, 1998). A small number of studies were checked by a second researcher, with any differences being debated before being resolved. All studies

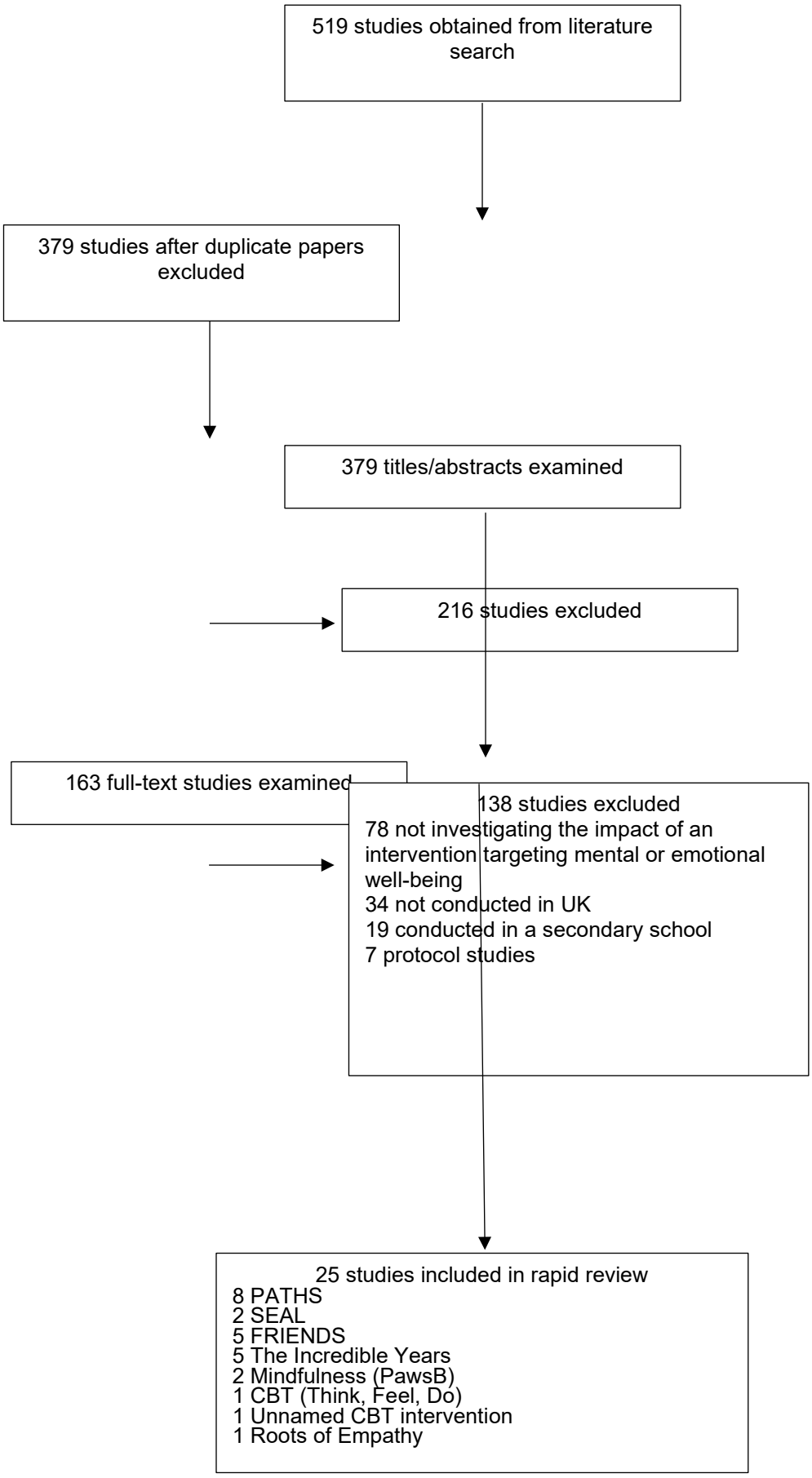
regardless of quality were included in the rapid review to reflect the true nature of interventions currently used in UK primary schools (see appendix 1).

## Evidence synthesis

Narrative synthesis was used to provide an account of the results using guidelines produced by Popay et al. (2006). Details about research aims, the type of intervention being investigated, participants, methodologies, measures, findings, strengths and limitations were sourced. Details about the effectiveness of intervention type (targeted vs universal), and intervention lead (teacher-led vs psychologist/health-practitioner led) were also sourced. An overview of the review's methodology from search procedure to evidence synthesis can be seen in figure 1.

**Figure 1**

*flow chart demonstrating the study selection procedure*


519 studies obtained from literature search
379 studies after duplicate papers excluded
379 titles/abstracts examined
216 studies excluded
163 full-text studies examined
138 studies excluded
78 not investigating the impact of an intervention targeting mental or emotional well-being
34 not conducted in UK
19 conducted in a secondary school
7 protocol studies
25 studies included in rapid review
8 PATHS
2 SEAL
5 FRIENDS
5 The Incredible Years
2 Mindfulness (PawsB)
1 CBT (Think, Feel, Do)
1 Unnamed CBT intervention
1 Roots of Empathy

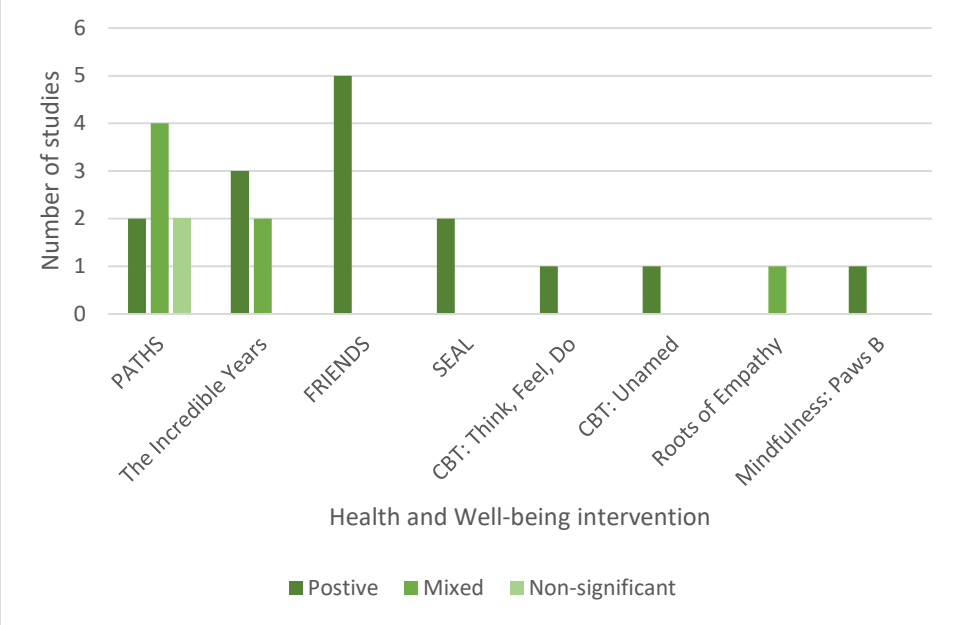
## Results

### Overview of interventions

A total of 25 studies were included in the narrative synthesis. Of these, all were conducted in the UK. An overview of all studies included in the review can be found in appendix 2. Of the 25 studies included in the review, the Down's and Black (1998) checklist revealed 8 to be of 'good' quality, 8 to be of 'fair' quality and 9 to be of 'poor' quality.

**Figure 2**

*Bar chart demonstrating the number of health and well-being intervention studies with positive, mixed, and non-significant findings.*




### Promoting Alternative Thinking Strategies (PATHS)

A total of 8 studies included in the review examined the PATHS intervention. Of these, all were conducted in the UK, with 3 conducted in England, and 1 conducted in Northern Ireland. 7 studies were conducted in Primary schools, and 1 in a middle school. The PATHS intervention is a social and emotional learning program that was designed to support young pupils in the management of their emotions and actions, and help them navigate social interaction and cooperation (Humphrey et al., 2016). PATHS is by far the most widely researched primary school health and well-being intervention in the UK, with a

number of reviews and randomized control trials assessing its impact on a range of outcomes related to child well-being (Humphrey et al., 2016).

2 of the studies included in this review reported positive outcomes from implementing the PATHS curriculum and were generally supportive of the use of PATHS as a well-being program, however both studies were rated 'poor' in terms of their quality. Curtis and Norgate (2007) ran the PATHS intervention with 5 UK schools and found significant post intervention improvements in areas of emotional symptoms ($p < .0001$), conduct problems ($p < .0001$), hyperactivity ($p < .0001$), peer problems ($p < .0001$) and consideration ($p < .0001$). 3 schools were included as a control but did not demonstrate any improvements in emotional well-being. Qualitative analysis revealed that school staff believed PATHS to have assisted children's emotional development, empathy and problem solving. Kelly, Longbottom, Potts & Williamson (2004) conducted a qualitative study exploring the impact of the PATHS curriculum on children's emotional competencies. It was revealed that school staff thought the curriculum was innovative, easy to use, and was highly engaging. Teacher observed improvements in emotional regulation, emotional sensitivity and empathy were largely attributed to the program. Although a number of positive outcomes were reported in these studies, study limitations are important to consider. Curtis and Norgate (2007) failed to report effect sizes, and in addition the results may have suffered from observer bias. Further, Kelly et al. (2004) reported that at the time of study, training surrounding the PATHS intervention was unavailable, meaning the teachers delivering the program may not have been as well versed in the curriculum as those delivering the PATHS intervention in other studies. The study therefore does not provide the reader with an accurate picture of the impact of the PATHS intervention when led by fully trained educators.

4 PATHS interventions reported mixed results. Humphrey et al. (2016) found that PATHS failed to significantly improve emotional regulation, poor engagement, inability to focus and behavioral problems in primary aged pupils receiving the intervention, however improvements were seen in the control group. PATHS did however produce significant improvements in social-emotional learning according to the perceptions of school staff. Panayiotou, Humphrey & Hennessey (2020) found PATHS to have a moderate but significant impact on young student's mental wellbeing when compared to a control group ($p<.05$, $SE=.17$), yet no significant impact on positive social interaction or school community. Both studies were rated 'good' in terms of their quality. Similarly, an RCT conducted by Little

et al. (2012) reported slight improvements in child emotional well-being and behavior measures, such as aggressive behavior (P= -0.04), hyperactivity (p= -0.001), and cooperation (p= - 0.02) 12 months post PATHS intervention. However, none of these effects remained 2 years post intervention, and the study was considered only ‘fair’ in terms of its quality. In addition, Ross, Sheard, Cheung, Elliot & Slavin (2011) conducted an RCT evaluating a PATHS program adapted for schools in Northern Ireland. It was found that the intervention produced slight and inconsistent effects on social-emotional competencies, but effects were in the ‘positive direction’ and the study was considered ‘poor’. Again, several limitations exist in these studies which must be taken into consideration, including lack of effect size reporting (Little et al., 2012), additional SEL interventions continuing to run alongside the intervention of interest or
with control group participants (Little et al., 2012), and the use of self-report
measures as the only assessed outcome (Panayiotou et al., 2020).

2 papers reported that PATHS had no significant impact, both of which were considered to be ‘good’ quality. Berry et al. (2016) found that PATHS failed to have a significant impact on child health and well-being outcomes compared to a control group. PATHS did however have a significant positive impact on teacher rated outcomes such as aggression, peer interaction, attention, and impulsiveness, but these were not sustained 2 years post intervention. Additionally, when Panayiotou, Humphrey and Wiglesworth (2019) examined the association between social-emotional competencies and academic attainment, it was found that only psychological well-being had a significant impact on this relationship, with the PATHS intervention having no significant influence. These insignificant findings may have been due to poor methodological factors such as lack of independent observation and lack of reported p values and effect sizes (Berry et al., 2016), unrepresentative samples and issues with scale reliability and validity (Panayiotou et al., 2019), but as it stands, both studies offer no support for the PATHS intervention as a comprehensive and sustainable approach to child health and well-being.

As PATHS was designed to be implemented by school staff (Humphrey et al., 2016), it was expected that all of the intervention leads would be schoolteachers in the studies included. Indeed, 7 studies reported that the PATHS intervention was delivered by a teacher or member of staff. The intervention lead was unclear in only 1 of the PATHS interventions. Similarly, as PATHS was designed to be delivered in a universal manner (Humphrey et al.,

2016), as expected, 6 studies were universal in nature. A further 2 studies delivered PATHS as a universal intervention, but later included a separate targeted version of the intervention. Kelly et al. (2004) assessed the PATHS interventions with a target group of pupils who displayed significant problems with cooperation, confrontation and aggression. It was found that PATHS resulted in a significant increase in emotional language abilities ($p < 0.05$), emotional sensitivity ($p < 0.05$), self-expression ($p< 0.01$), and social-emotional competencies ($p < 0.05$) for the children included in this targeted study. Similarly, in a sub-analysis Little et al. (2012), reported that when PATHS was delivered to a group of young pupils with depression or anxiety, the intervention had a greater positive significant impact on health and well-being outcomes than those who did not suffer with anxiety or depression. lack of control group and small sample size (Kelly et al., 2004), and possible interference from other interventions running alongside PATHS (Little et al., 2012), makes drawing conclusions from these targeted interventions difficult.

FRIENDS

A total of 5 studies included in the review examined the FRIENDS program. All were conducted in the UK, and of these, 1 was conducted in England, and 1 in Scotland. 4 studies were conducted in Primary schools, with 1 study being conducted in a mixed primary and secondary school setting. The FRIENDS emotional well-being program is rooted in principles of CBT, and aims to help children recognise and overcome anxiety and negative thinking (Stallard, Simpson, Anderson, Hibbert & Osborn, 2007). The positive outcomes reported from studies across the globe has led to the World Health Organization endorsing FRIENDS as ‘The only evidence-based programme effective at all levels of intervention for anxiety in children’ (World Health Organisation, 2004). However, program use in the UK is far from extensive.

All 5 FRIENDS studies included in this review reported largely positive results, with anxiety being the most frequently assessed outcome. Stallard et al. (2005) found significantly decreased levels of anxiety ($p=0.003$) and significantly increased levels of self-esteem ($p=0.002$) in primary school aged children. Qualitative results revealed that the vast majority of children thought the program was enjoyable, engaging, effective, and would recommend it to a friend, however the study was considered to be ‘poor’ in quality. In a similar study 2 years later, Stallard et al. (2007) found that primary school children

experienced a significant decrease in anxiety (p=0.002), and a significant increase in self-esteem (p=0.04) 3 months after the FRIENDS program was implemented. Similar significant decreases in anxiety (p=.001) and increases in self-esteem (p=.005), that were maintained at a 12-month follow-up (anxiety (p=.003), self-esteem (p=.002) were found by Stallard, Simpson, Anderson and Goddard (2008). Liddle and Macmillan (2010) reported that that after the FRIENDS intervention, primary school children experienced a significant decrease in anxiety ($p<0.01$), and an increase in self-reported mood ($p<0.01$), self-esteem ($p<0.01$), and interpersonal skills ($p<0.05$). Teacher rated scores of interpersonal skills also increased significantly ($p<0.01$). These findings were sustained at a 4 month follow up assessment. All 3 studies mentioned above were of 'fair' quality. Finally, Stallard et al. (2014) produced another study, again replicating his previous findings, and demonstrating that that anxiety was significantly reduced (p=0.009) in young pupils 12 months post FRIENDS intervention. This investigation was rated 'good'. These studies clearly demonstrate that the FRIENDS intervention affords many benefits to young pupils' well-being, when carried out in a primary school setting. In terms of the strengths of these studies, Stallard et al. (2014) highlights the robustness of the study's methodology in terms of the impressive recruitment and low dropout rates stated, as well as the high program fidelity. However, there are a number of limitations to each study that must be considered, from small and unrepresentative samples (Stallard et al., 2008, 2007, 2014), lack of or short follow up periods (Stallard et al., 2005, 2007, 2014), an absence of control group condition (Stallard et al., 2005, 2007, 2008), over reliance on self-reports (Stallard et al., 2005, 2014), and a failure to assess a crucial well-being outcome; intervention impact on mental health service referrals (Stallard et al., 2005). Furthermore, 4 out of 5 studies conducted in the UK were carried out by the same primary author. While Stallard is clearly invested in the impact of the FRIENDS intervention, investigator bias should be considered when interpreting results.

Of these 5 FRIENDS intervention studies, 4 were led by a school nurse, with 1 being led by a team of psychologists. The decision to have school nurses deliver the intervention was well justified within the literature. Stallard et al. (2007) stated that school nurses offer a unique vehicle through which well-being interventions can be delivered, due to their knowledge of emotional and psychological health, as well as their experiences working in an educational setting alongside young pupils. School nurses are able to identify any specific issues related to health and well-being and refer then on to appropriate specialists where necessary, whilst ensuring that FRIENDS remains statutory in the curriculum, and is

not displaced by other more ‘academic’ subjects. Support from these claims were provided by a later study by Stallard et al. (2014), where although FRIENDS reduced pupil’s anxiety across the board, a greater reduction was seen in the group who received the intervention from a health practitioner, rather than a teacher. This was thought largely to be due to a low completion rate of the FRIENDS homework segment when the program was delivered by teachers, although it is important to note that the authors failed to assess whether differences in leader willingness, passion, self-confidence and ability to inspire students impacted the study’s outcome. In contrast, the one study that utilized an educational psychologist to deliver FRIENDS reported positive outcomes, however the authors highlighted that educational staff may be better suited to deliver school-based well-being interventions as they are better able to adopt a culture of health and well-being that is upheld throughout the school.

Although the FRIENDS program was delivered universally in all 5 studies, 4/5 studies included subgroup analyses with students with increased levels of anxiety and low levels of self-esteem. In each case it was found that FRIENDS afforded similar or greater well-being benefits to the at-risk group than the average class student. In their subgroup analysis, Stallard et al. (2005), found that children with low self-esteem and high anxiety experienced significant improvements in both outcomes postintervention (anxiety $p=0.023$, self-esteem $p=0.0001$). Similarly, Stallard et al. (2007), found that anxiety ($p=0.011$) and self-esteem ($p=0.010$) were significantly reduced in a group of high-risk children who experienced particularly high levels of anxiety and low levels of self-esteem pre intervention. In later studies, Stallard et al. (2008) found that over 60% of children experiencing elevated anxiety levels and low self-esteem had moved from the ‘high-risk’ group to the ‘low risk’ group 12 months after the FRIENDS intervention was implemented, and in 2014, Stallard et al. found that pupils with the highest pre-intervention anxiety scores experienced significant reductions in anxiety post FRIENDS. While there is often concern that universal interventions fail to reach and have an impact on pupils who experience the greatest difficulties with their mental well-being (Stallard et al., 2005), these subgroup analyses may prove otherwise. Although these studies do not include a comparison of whether FRIENDS has a greater impact on high-risk groups or year group classes as a whole, it is clear that FRIENDS is able to positively impact both groups when delivered universally, whilst creating a more inclusive environment where mental health worries are discussed freely (Stallard et al., 2007). Furthermore, as anxiety and low self-

esteem are highly prevalent amongst young children, but are not always detected, the FRIENDS program may well be most successful when delivered on a universal basis (Stallard et al., 2014).

The Incredible Years

5 studies included in the review assessed the impact of The Incredible Years program, all of which were conducted in Wales, in a primary school setting. The Incredible Years program was designed as an intervention to increase children's interpersonal and socio-emotional skills. There is also a strong emphasis on increasing problem solving and self-confidence, while reducing unwanted behaviors such as aggression and unmanageable anger (Hutchings, Lane, Owen & Gwyn, 2004). The program has been widely evaluated internationally, with reports of increasingly positive staff management of children displaying challenging
behaviors, and high academic attainment following the program's introduction (Williams, Bywater, Lane, Williams & Hutchings, 2019).

3 studies of the Incredible Years program reported positive outcomes. Hutchings et al. (2004) conducted a pilot study of the Incredible years and found that after implementing the incredible years program there was a significant reduction in aggressive and problem behaviours seen in the pupils ($p=.0431$), however, the program was found to have no significant impact on children's abilities to control their actions. Qualitative interviews revealed that parents believed the program had resulted in improvements in self-confidence, emotional intelligence, and communication, while school staff reported that the program offered benefits to both pupils and educators, due to the creation of a calm and friendly school environment. In the first full-scale study of the Incredible years, Hutchings et al. (2007) found that teachers that had been trained in the incredible year's classroom management gave significantly clearer instructions ($p=.048$), and their pupils displayed significantly lower levels of non-compliance ($p=.018$) and greater positive behavior ($p=.011$), compared to untrained teachers. Qualitative interviews revealed that school staff were happy with the program and believed it to be useful in improving student's attitudes and behaviors. However, both above studies were 'poor' of quality. In a later study, that was rated as 'fair' (Hutchings, Martin-Forbes, Daley & Williams, 2013) conducted a randomized controlled trial of the Incredible Years. It was found that pupils in the intervention condition displayed significantly greater classroom focus, compliance, and significantly lower levels of high-risk

pupil negative behavior towards school staff compared to a control group. Intervention group teachers also displayed significantly less negative behavior towards high-risk pupils. However promising the results, it is important to consider their limitations. Such study conclusion are limited by lack of follow up research and control group (Hutchings et al., 2004), small samples (Hutchings et al., 2004, 2007, 2013), sampling bias (Hutchings et al., 2007), lack of treatment fidelity measure (Hutchings et al., 2013), and possible condition contamination effects, due to control and intervention teachers working within close proximity to each other (Hutchings et al. (2007).

2 Incredible years studies reported mixed results. Hutchings et al. (2012) investigated the impact of a targeted version of the incredible years program. It was found that after the delivery of the intervention, target pupils in the intervention group displayed significantly greater levels of problem-solving behavior. However, there was no significant difference found in the positive treatment of teachers by pupils, or positive treatment of pupils by teachers between intervention or control conditions. Similarly, Williams, Bywater, Lane, Williams & Hutchings (2019) also investigated the impact of a targeted version of the incredible years, and found that intervention children displayed significantly greater levels of problem solving ($p<.001$), and socio-emotional intelligence ($p=.005$) compared to control children. However, there were no significant differences between control and intervention pupils in terms of teacher-reported outcomes. The former study was considered ‘fair’ in terms of its quality and the latter study was ‘good’. Again, there are important limitations to consider here, such as lack of follow up analysis (Hutchings et al., 2012), lack of fidelity measures and possible contamination effects as control and intervention participants attended the same institution, and sometimes shared the same classroom (Williams et al., 2019). As in the case of the FRIENDS intervention, all studies in the review investigating The Incredible Years cited Hutchinson as a primary researcher, meaning the possibility of investigator bias cannot be ruled out.

All 5 studies of The Incredible Years were delivered by teachers or school staff. Many papers included a justification for why educators were best suited to delivering The Incredible Years intervention, such as teachers being able to weave the intervention into all areas of the curriculum, leading to a more sustainable, long-term, low-cost approach to health and well-being (Williams et al., 2019; Hutchings et al., 2004). Hutchings et al. (2007) also points out how crucial the student-teacher relationship is for health and well-being.

Strained student-teacher relations often occur due to disruptive classroom environments, where teachers are too busy dealing with incidences of negative behavior to form meaningful connections with their students. It has subsequently been found that strained student-teacher relations are associated with poor behavior and academic attainment in later schooling (Hamre & Pianta, 2001). Therefore, by training teachers to deliver The Incredible Years, particularly the classroom management program, they are better equipped to manage classroom conflicts and instances of challenging behavior, thus creating space for a deeper more meaningful connection with their students. As none of the studies investigate the delivery of the program with non-school staff, it may be interesting to see if future research provides this comparison to investigate whether educators are truly the best option to deliver this program.

3 out of 5 studies delivered the intervention as a universal program, whereas 2 delivered the intervention in a targeted manner to at risk groups of pupils. In Williams et al.'s (2019) study, 221 children were identified by their teachers as having significant emotional or behavioral problems. They were assigned to receive a therapeutic targeted version of the Incredible years, or a control group, where educators were delivering the standard universal version of the incredible years program. It was found that when the incredible years was delivered as a targeted intervention for at risk pupils, it resulted in greater improvements in problem solving and socio-emotional intelligence than when delivered as a universal class-wide intervention. Similarly, Hutchings et al. (2012) assessed the impact of the therapeutic targeted version of the incredible years. This study was conducted in response to feedback from educators stating that the incredible years program was not sufficient for all pupils and that those with significant emotional and behavioural problems may require a more intensive intervention. Educators therefore selected 24 students who required supplementary emotional support, who were allocated to a control or intervention condition. No significant differences were found between the control or intervention condition on any of the assessed variables. However, when a subgroup analysis of participants who displayed clinical levels of emotional difficulties was conducted, it was found that they displayed greater problem-solving behavior after experiencing the incredible years intervention.

Social and Emotional Aspects of Learning (SEAL)

2 studies investigated SEAL interventions, both of which were conducted in the UK. 1 of the studies was conducted in a Primary school setting, while the other was conducted in a middle school setting. SEAL programs were developed as a way to support pupil's socio-emotional learning and help them manage their behaviors. Program themes include cooperation, peer interaction, relationships and change. Social and emotional learning programs have been widely evaluated, with reviews reporting positive outcomes when programs are utilized effectively, and are embedded within the primary school system (Hallam, 2009).

Both SEAL evaluations included reported positive outcomes. Hallam (2009) investigated the impact of SEAL on primary school pupil's emotional health and well-being. It was found that 90% of educators believed the intervention to have a positive impact on their school, with the majority of staff believing that the intervention supported pupil's socio-emotional development, emotional intelligence, anger management, empathy, and co-operation. The program offered benefits for students and staff alike, as it was reported that the intervention helped educators put themselves in their pupils' shoes to better understand their experiences. Similarly, Banerjee, Weare and Farr (2014) conducted a mixed methods study investigating SEAL. It was found that when SEAL was fostered by the school in a wholistic manner, it was significantly associated with a positive school culture. This relationship was found to be key to the association between positive student social interaction, academic attainment, and school attendance. Thematic analysis of classroom observation notes revealed several key positive themes to implementing the SEAL framework, including improvements in staff health and well-being, creating an inclusive work environment for students, and opportunities for staff to advance their professional development. However, both studies are considered to be 'poor' quality and hold several limitations. For example, lack of follow up research to assess the long-term impacts of SEAL (Hallam, 2009; Banerjee et al., 2014), lack of control group (Hallam, 2009), small sample size (Hallam, 2009), and a failure to use robust outcome measures (Banerjee et al., 2014). It is also noteworthy that while the importance of qualitative research cannot be underestimated, both studies fail to support their conclusions with clinically meaningful statistical evidence, leading to questions about the reliability of their findings.

In both studies the intervention was carried out on a universal basis to the whole class, and was delivered by a member of school staff, namely the class teacher. Both studies cite the universal nature of SEAL as paramount to the program's success. For example, in Hallam's (2009) study, it was found that when SEAL was adopted wholistically by both staff and pupils and integrated across all aspects of the curriculum, the well-being messages upheld by SEAL were reinforced in all areas of learning. This in turn was associated with a more positive learning environment. Similarly, in Banerjee et al.'s (2014) study, the positive outcomes of improved school climate, academic attainment, social interaction and attendance were dependent on SEAL being approached by the school in a universal manner, where all staff and pupils were engaged in the promotion of emotional and social well-being. Arguably, this culture of improved social well-being, where discussions about emotional health can be held openly, fails to emerge when interventions are implemented with only target populations rather than the whole school Populus. However, without studies implementing SEAL in a targeted manner to provide a comparison, it is difficult to know this for sure.

Mindfulness (Paws B)

2 studies were included in the review investigating the impact of the mindfulness program Paws B. both studies were conducted in the UK, with 1 of the studies stating it was conducted in England. Both studies were conducted with primary aged children. The paws B program was designed as an adapted version of the mindfulness program '.b for teens' that had previously been implemented in a number of UK high schools and sixth forms (Thomas & Atkinson, 2016). The mindfulness-based activities were altered so that their content was suitable for younger pupils, and aimed to help children become more present and aware of their surroundings so as to help them with their learning and emotional well-being (Vickery & Dorjee, 2016).

Both studies reported positive outcomes from their investigations. Thomas and Atkinson (2016) conducted an RCT of Paws B, where pupils were randomly assigned to either a Paws B intervention condition or a control condition. The results revealed that pupils who received the Paws B intervention experienced a significant increase in their ability to

focus (p=.033) compared to those in the control group. This result was not maintained at 8 weeks post intervention; however, it was found again later, at a 14 week follow up. In a second study conducted by Vickery and Dorjee (2016) it was found that when educators implemented Paws B to primary school children, the pupils displayed significantly decreased levels of poor mental well-being (p = 0.010), and increased levels of emotional intelligence (p=0.002) compared to a control group. It was also found that over 70% of pupils who received the Paws B intervention enjoyed practicing mindfulness and expressed desire to see it as a permanent fixture in the curriculum. Both studies of Paws B were rated as being 'fair', but held a number of limitations. Thomas and Atkinson (2016) point to the fact that their study included an unrepresentative sample and a short follow up period. Vickery and Dorjee (2016) state that their study relied on self-report measures which may lower reliability, and had a short follow up period.

Both studies employed the Paws B program universally by delivering it to an entire class or cohort, and in both studies the intervention was delivered by the class teacher. Neither study went into great detail when justifying the decisions made about intervention type and lead, however Vickery and Dorjee (2016) state that the success of many early intervention programs hinges on crucial health and well-being knowledge and skills being disseminated to all students in an inclusive manner, and that one way to do this is by drawing upon the experience and skills of the class teacher. Therefore, the decision was made to investigate the impact of Paws B when implemented by primary educators.

CBT (Think, Feel, Do)

1 study investigated the CBT program Think, Feel, Do in a primary school sample of pupils in England. Think, Feel, Do is an online intervention that is based on principles of Cognitive Behavioral Therapy (CBT), and aims to combat symptoms of anxiety and depression by identifying and dealing with unhealthy thoughts in a healthy manner (Attwood, Meadows, Stallard & Richardson, 2012). Although the use of online CBT interventions with adults has been thoroughly researched, there is a scarcity of research investigating its impact with child populations, and when reviews have been undertaken, they are based outside of the UK, namely in Australia (March, Spence & Donovan, 2008; Spence, Holmes, March

& Lipp, 2006). Attwood et al. (2012) provide one of the only UK-based studies of online CBT using a population of primary aged children.

Attwood et al. (2012) conducted a 2-part study of Think, Feel, Do which was rated as being 'poor' quality. In the first arm of the study the intervention was delivered to a class of students who were assigned to a control or intervention condition. The results revealed that significantly lower levels of social ($p < .05$) and generalized ($p < .05$) anxiety were found in the intervention group post Think, Feel, Do, compared to the control group. In the second arm of the study, Think, Feel, Do was delivered to students with socio-emotional difficulties. It was found that both mood ($p <.05$) and anxiety ($p <.05$) significantly increased post intervention. It was also found that participants in both arms of the study thought positively about the intervention and that it was helpful, however some of the CBT components were difficult for very young children to grasp. Study limitations included the small and male only sample, lack of follow up assessment, and lack of control comparison in the second arm of the study.

In arm 1 of the study, the intervention was carried out by a researcher, whereas in study 2 the intervention was carried out by a school nurse. While it was found that the intervention produced positive outcomes when delivered by both the researcher or a school nurse, no direct comparison of the two intervention leads took place. Any tentative comparisons are also limited by the fact that a number of differences exist between the two conditions. For example, in the first arm of the study the intervention participants attended weekly 45-minute group meetings with the researcher, but in the second arm, intervention participants met once every 1-2 weeks individually with the school nurse. In each case exact data about intervention duration and fidelity is unknown. Furthermore, in arm one of the study the CBT intervention was carried out in a universal manner to a class of 13 male students. In arm 2 of the study the intervention was carried out in a targeted manner to a group of students who were selected by school staff as significant socio-emotional difficulties. Again, the intervention was found to be successful in both arms of the study. The study therefore concluded that Think, Feel, Do can be effectively employed both universally and in a targeted manner, however the researchers did not provide a direct statistical comparison. This limits any conclusions that can be drawn about how Think, Feel, Do can be delivered most optimally.

Unnamed CBT intervention

1 study investigated the impact of an unnamed health and well-being intervention delivered to primary school pupils in Scotland. The intervention was based on principles and theories of CBT and aimed to promote mental well-being and healthy coping strategies through the identification of their own emotions and healthy support networks.

Collins, Woolfson and Durkin (2014) randomly assigned students to receive the intervention delivered by a class teacher, a psychologist, or a control group. It was found that in both intervention conditions self-reported feelings of anxiety (teacher led $p<0.001$, psychologist led $p<0.001$) and use of unhealthy coping strategies (teacher led $p<0.001$, psychologist led $p<0.001$) significantly decreased, whereas use of active coping strategies significantly increased (teacher led $p<0.001$, psychologist led $p<0.001$) compared to the control group. However, there were no significant differences between intervention and control conditions when it came to seeking out healthy support groups. All outcomes persisted 6 months after the CBT intervention concluded. Despite the fact that the study was rated as being ‘good’ quality, and that it reports largely positive results, the study is limited by its reliance on self-report measures, and possible conflict of interest, as one of the studies primary researchers was involved in the creation of the intervention, and helped to train the school staff who delivered the program to the students, meaning there is a possibility that researcher bias may have confounded the results.

Critically, this study provides a direct comparison between intervention leads, as in one of the intervention conditions, the program was led by a schoolteacher, whereas in the other intervention condition, a trained psychologist implemented the program. When the two conditions were compared however, it was found that there were no significant differences in any of the outcomes assessed, apart from unhealthy coping skills, between the two groups; participants experienced benefits to their well-being regardless of whether a teacher or a psychologist led the intervention. In terms of healthy coping skills, greater improvements were seen in participants who received the intervention from the teacher rather than the psychologist ($p= 0.025$) 6 months post intervention. This suggests that teachers may be the best option when it comes to delivering school-based health and well-being

interventions that aim to target student coping strategies. Furthermore, while the intervention was carried out universally, sub analysis revealed that at risk students in the intervention conditions with high levels of anxiety particularly benefitted from the intervention, and were significantly less likely to be classed as ‘high risk’ post intervention (teacher led pp=0.022, psychologist led p<0.001) compared to control students. This suggests that the program can successfully be employed as a universal intervention, while remaining powerful enough to have an impact on high-risk populations, however more research is needed to substantiate these claims.

Roots of Empathy

1 study investigated the impact of the Roots of Empathy program in a primary school in Northern Ireland. The program aims to increase student’s capacity for empathy, interpersonal interactions and reduce challenging behavior. The program was created and carried out in Canada, and has only just reached the UK, meaning there is very little research examining the impact of the program in Britain.

Connolly et al. (2018) (26) randomly allocated students to a roots of empathy intervention condition or a control condition. It was found that modest significant improvements in students intersocial interactions (p=0.045), but not challenging behavior or empathy, were found in students who received the Roots of Empathy intervention compared to the control group. This finding was not maintained 3 years post intervention. Qualitative interviews with school staff revealed that the children enjoyed many of the materials and that the program was inclusive. However, many educators felt the program lacked an element of fun and creativity, left no room to be flexible, and at times was too repetitive. The study was considered to be of ‘good’ quality but suffered from high levels of participant dropout, meaning the research likely lacked statistical power. However, the sample was large and highly representative, and the study had high external validity.

The study was carried out universally to all students and was led by a class teacher. The researchers did not provide detailed justification of the decisions made surrounding intervention type and implementation, and with a lack of additional studies investigating this

specific intervention, it is difficult to infer what the optimal delivery of this CBT program may look like.

## Discussion

### What health and well-being interventions are currently being carried out in UK primary schools?

In response to the growing responsibility placed on UK schools to implement and uphold health and well-being interventions, many schools are keen to create a healthy climate, where issues surrounding emotional health are discussed openly (Guva & Hylander, 2012). The need for open communication about well-being is now critical in the wake of the COVID-19 pandemic, which is reflected in the number of well-being programs currently being implemented in British primary schools, which has increased exponentially in the past 2 decades, as highlighted by this review. Social and emotional learning programs and cognitive behavioural therapy-based programs appear to be by far the most widely used health and well-being interventions in the UK. A total of 10 interventions based on social and emotional learning were included in the review, 8 that employed the PATHS curriculum and 2 that employed SEAL interventions in UK primary schools. In terms of the geographical spread of these interventions, all were conducted in the UK, 3 in England, and 1 in Northern Ireland, with the first UK based social and emotional learning investigation being carried out in 2004. A total of 7 CBT based interventions were included in the review, with 5 studies examining the FRIENDS intervention, 1 examining the CBT program Think, Feel, Do, and 1 examining an unnamed CBT based intervention. These interventions were carried out in English and Scottish primary schools. The Incredible Years intervention is by far the most widely used intervention in Welsh primary schools, with 5 studies being included in the review. In more recent years, further interventions aiming to target mindfulness and empathy are being seen, however they are yet to be widely carried out and reviewed in Britain. This is reflected in the 2-mindfulness school-based interventions conducted in the UK in 2016, and most recently in 2018, a review of the intervention Roots of Empathy conducted in Northern Ireland.

### What is the evidence base for these UK interventions?

In terms of the evidence base of social and emotional learning interventions, many UK based studies exist, which are of varying quality and offer mixed results. Studies of the

PATHS intervention reported that the program resulted in several positive outcomes, including improvements in student emotional regulation, challenging behaviour, hyperactivity, peer interactions, social-emotional learning, and emotional and mental well-being (Curtis & Norgate, 2007; Humphrey et al., 2016; Little et al., 2012; Panayiotou et al., 2020). Qualitative research also allowed an exploration of school staff's experiences and impressions of the PATHS intervention, finding that educators believed that the program supported students' development of empathy, problem solving and that they believed the curriculum to be innovative, simple and engaging (Curtis & Norgate, 2007; Kelly et al., 2004). However, PATHS failed to have an impact on several assessed outcomes including class engagement, focus, positive social interaction, school community, and in one case it was even reported that a control group of students made greater progress than the students who received the PATHS intervention (Humphrey et al., 2016; Panayiotou et al., 2020). Furthermore, there are several cases where PATHS was reported to have a positive impact, but that any benefits afforded to students and staff were not sustained long term (Berry et al., 2016; Little et al., 2012). It is also crucial that we consider the fact that the two studies which reported solely positive outcomes from implementing the PATHS curriculum were both rated 'poor' in quality (Curtis & Norgate, 2007; Kelly et al., 2004). Of the 4 studies that were rated to be 'good' in terms of their quality, 2 reported mixed outcomes (Humphrey et al., 2016; Panayiotou et al., 2020), with the remaining 2 studies finding that PATHS had no significant impact on the mental well-being outcomes assessed (Berry et al., 2016; Panayiotou et al., 2020). In terms of the SEAL program, investigation results overall are more positive, as educators believed the program had a largely positive impact on their students, supported their socio-emotional development, emotional intelligence and awareness, positive school environment, academic attainment, and attendance (Hallam, 2009; Banerjee et al., 2014). However, both of the studies reporting the positive impacts of SEAL were rated 'poor' in quality, calling into question the extent to which we can draw firm conclusions about the intervention.

The evidence base for CBT interventions such as FRIENDS and Think, Feel, Do, is also broad, and largely positive results are reported. The FRIENDS intervention has been reported to consistently reduce anxiety, and increase self-esteem, mood, and interpersonal skills (Liddle & Macmillan, 2010; Stallard et al., 2005, 2007, 2008, 2014). Qualitative reviews also highlight the enjoyable nature of

the intervention, which was found to be both engaging and effective by students (Stallard et al., 2005). Crucially, several studies reported that the benefits construed by the FRIENDS intervention were maintained at long-term follow up periods (Liddle & Macmillan, 2020; Stallard et al., 2008, 2014), suggesting that this is a viable and sustainable health and well-being program. Although all investigations of the FRIENDS intervention report positive findings, not all are of sound quality. 1 of the studies was rated to be 'poor' (Stallard et al., 2005) with 3 others being rated as 'fair' (Liddle & Macmillan, 2010; Stallard et al., 2007, 2008). This would suggest that the positive results reported by all 4 studies are not as promising as initially believed. However, one of the studies was 'good' quality, which importantly reported positive findings that were maintained longitudinally (Stallard et al., 2014). Another CBT study of the Think, Feel, Do intervention found reduced levels of student anxiety and depression post intervention (Attwood et al., 2012), however the positive findings were again hampered by the 'poor' quality rating of the study. Finally, an unnamed CBT-based intervention resulted in improvements in anxiety and ability to cope for primary school pupils (Collins et al., 2014). These results were again maintained in the long-term, but the intervention failed to impact students' ability to seek out healthy support groups. The study was rated as 'good' in terms of its quality however, meaning that the results may accurately reflect the outcomes of the program.

The evidence base for the Incredible Years intervention appears to be much more mixed, with studies reporting both positive and inconclusive results. The program has been reported to successfully reduce aggression, challenging behaviours, and non-compliance, and increase self-confidence, emotional intelligence, communication, and problem solving (Hutchings et al., 2004, 2007, 2012; Williams et al., 2019). Qualitative interviews with parents and school staff revealed that the program resulted in a more positive school climate and an improvement in students' attitudes and behaviours (Hutchings et al., 2004, 2007). However, it was also revealed that the program failed to impact students' self-control, students' treatment of school staff or staff's treatment of students (Hutchings et al., 2004; Williams et al., 2019). Of the 3 studies that reported positive findings, 2 were rated as being 'poor' in terms of their quality (Hutchings et al., 2004, 2007) and 1 was rated as 'fair' (Hutchings et al., 2013). Of the results that reported mixed

findings, one was rated as being ‘fair’ (Hutchings et al., 2012) and the other as being ‘good’ quality (Williams et al., 2019).

Other interventions in the review included 2 mindfulness reviews of the program Paws B (Thomas & Atkinson, 2016; Vickery & Dorjee, 2016), and 1 investigation of the Roots of Empathy curriculum (Connolly et al., 2018). While the evidence base for these interventions is far from vast or well supported in the UK, the studies offer interesting findings. The results from both mindfulness studies were positive in nature. Paws B was found to increase pupils ability to focus, mental wellbeing and emotional well-being (Thomas & Atkinson, 2016; Vickery & Dorjee, 2016). In the first study, it was found that the positive results had disappeared at an 8 week follow up, but had reappeared at 14 weeks, however the authors offered no explanation for why this may be. Both studies were of ‘fair’ quality. Roots of Empathy was found to result in slight improvements in student social interactions, but not challenging behaviour or empathy. These findings were also not maintained at a 3 year follow up, yet the study was of ‘good’ quality.

Among the 25 studies included in this review, 16 reported positive findings, 5 reported mixed findings, and 4 reported non-significant findings. Of the 16 studies that reported positive findings, 8 were of ‘poor’ quality, 6 were considered to be of ‘fair’ quality, and 2 were considered to be of ‘good’ quality. Of the 4 studies that reported non-significant findings, 0 were of ‘poor’ quality, 1 was considered to be of ‘fair’ quality, and 3 were considered to be of ‘good’ quality (see figure 3). This is indicative of an overall trend, where studies that reported more positive findings, and thus offered more support for their respective intervention, were more likely to be considered ‘poor’ in terms of their quality, and where studies that reported that the intervention under investigation had no significant impact, were more likely to be considered ‘good’ in terms of their quality.

**Figure 3**

*Pie chart, where figure 3a demonstrates the number of studies identified in the review reporting positive, mixed and non-significant findings, figure 3b demonstrates the quality rating of studies identified in the review reporting positive findings, and figure 3c demonstrates the quality rating of studies identified in the review reporting non-significant findings.*

Figure 3a

Figure 3c

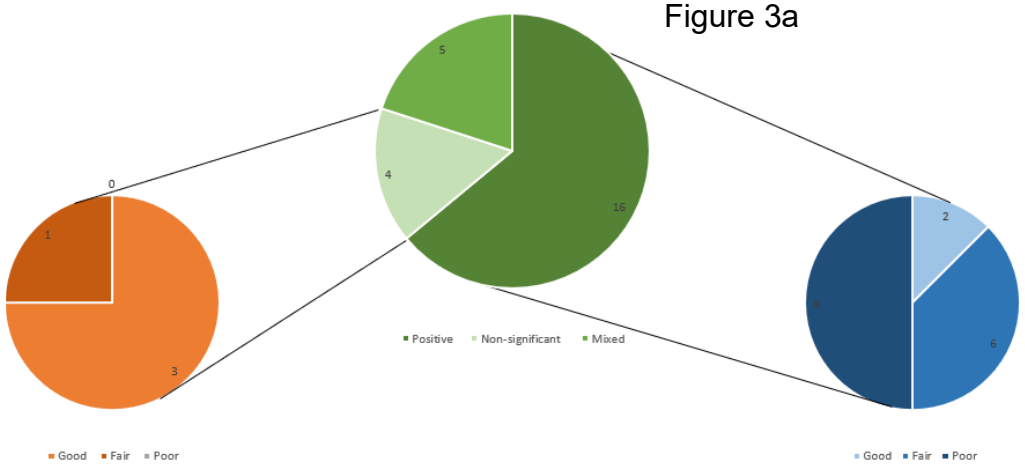



Figure 3b

Overall, the results demonstrate the greatest support for CBT based interventions such as the FRIENDS program. This is in line with UK reviews that have found support for CBT-based interventions (Caldwell et al., 2019; Clarke et al., 2021) when used with primary aged students, as well as international reviews that offer support for CBT based studies, particularly for the FRIENDS intervention, that was found to reduce both anxiety and low mood (Dray et al., 2017; Johnstone et al., 2018). However, although most studies investigating these programs report positive outcomes, many of the studies included in this rapid review hold a number of limitations, leading to mixed quality ratings. This means that the support for CBT-based interventions is small, and that such interventions can only be endorsed to a certain extent. This is in line with the findings of both UK (Caldwell et al., 2019; Mackenzie & Williams, 2018) and international (Werner-Seidler et al., 2021) reviews that report that their investigations in school-based health and well-being programs offer only weak support for the programs investigated. This review also revealed tentative support for Social and Emotional Learning programs and The

Incredible Years program, however, to fully endorse either program, additional high quality supporting evidence is needed, that is not clouded by the risk of researcher bias. Additional high-quality research is also needed before the mindfulness based PawsB interventions and empathy-based Roots of Empathy program can be endorsed. Very few studies included in the review reported follow up investigations, and those that did often found that any positive impacts gained from intervention implementation were lost. This finding was also reported by Fenwick-Smith et al. (2018), who found that most of the health and well-being investigations did not report long term successes. Finally, the review revealed a general trend where studies rated 'poor' in terms of their quality were more likely to report positive results, and those that were rated as 'good' quality were more likely to report non-significant findings. This trend, which was also reported by Mackenzie and Williams (2018), makes it difficult to fully endorse any of the interventions included in the review as having a solid evidence base.

Is it best to deliver health and well-being programs in a universal or targeted manner?

In terms of optimal intervention delivery, when it comes to advising educators and institutions about delivering health and well-being interventions in a universal versus targeted manner, the picture is unclear. Most studies in this review were delivered in a universal manner to all students. For many interventions, such as SEAL and PAWS B, universal delivery is considered crucial to intervention success as this promotes inclusivity, with one study reporting that the positive outcome of a healthier learning environment was related to the SEAL program being embedded across the school and reinforced across all learning areas (Banerjee et al., 2014). PATHS is also an intervention that is designed to be implemented universally, however, 2 out of 8 PATHS investigations in this review involved a targeted implementation of PATHS, both of which resulted in positive outcomes in the form of gains in well-being and emotional intelligence (Kelly et al., 2004; Little et al., 2012). This suggests that even when well-being programs are designed to be implemented universally, targeted versions of the same program can still exert a positive impact on students most at risk in terms of their mental well-being. This is supported by the fact that The Incredible Years program was originally designed to be implemented universally, however a targeted version of the program was designed to be delivered to those with significant emotional instabilities after educators fed back to program developers that the intervention was not sufficient for all pupils. This targeted version was

evaluated in 2 studies in this review (Hutchings et al., 2012; Williams et al., 2019), both of which found that the targeted version of the intervention resulted in greater benefits in problem solving and socio-emotional difficulties. Two interventions, FRIENDS and the unnamed CBT intervention, were delivered in a universal manner, but when analysing the results of the investigations, the researchers carried out a subgroup analysis to assess the impact of the intervention with cat risk' students. All such subgroup analyses demonstrated that when universal interventions are implemented, they hold the power to exert similar or greater benefits onto pupils considered cat risk' in terms of their well-being (Collins et al., 2014; Stallard et al., 2005, 2007, 2008, 2014). The CBT-based intervention, Think, Feel, Do, was evaluated in 1 study in this review (Attwood et al., 2012), where in arm 1 it was delivered in a universal manner and in arm 2 it was delivered in a targeted manner. It was found that the intervention was successful when delivered both universally to all pupils and in a targeted manner to at risk pupils, but crucially the authors did not include a direct comparison between conditions. Finally, the Roots of Empathy program was investigated in one study (Connolly et al., 2018) where it was delivered universally and exerted a positive impact on primary aged students. However, no other investigations of the program were included in the review, meaning we do not know if the intervention would be more or less successful if delivered in a targeted manner. The limitations of the last two interventions, Think, Feel, Do and Roots of empathy, make it difficult to draw conclusions about optimal intervention delivery for those programs.

Implementing health and well-being interventions in both a universal and targeted manner can be successful in different ways, however, this may depend on the program being implemented, and far too few studies exist where a direct comparison between targeted and universal implementation is considered. Many programs are better suited to universal delivery, due to the fact that they are designed to help reduce stigma by opening up conversations about mental health, and exert their effects through integration into all learning areas. However, in some cases it has been found that when interventions are delivered in a targeted manner to students experiencing significant emotional difficulties, they can be more effective than when delivered universally. Based on the studies included in this rapid review, it is recommended that educators and researchers select and implement a well-evidence universal intervention so that all pupils benefit from learning to take care of their well-being, but assess the intervention's ability to impact the well-being of

a subgroup of cat risk' students. If this assessment reveals the intervention is unable to successfully influence such students when implemented universally, then a targeted version of the intervention should be trialed, as in the case of the incredible years where a therapeutic targeted version of the program was created in response to concerns that the universal program was not sufficient to meet the needs of students suffering with their mental health. This is in line with recent guidance published by the Welsh Government (2021) which sets out ways in which educators can work towards achieving a whole school approach to health and well-being education. Within the document, a framework advises schools in Wales to first assess the needs of their pupils, and create an action plan to address how best to implement health and well-being education before delivering well evidenced interventions in a universal and targeted manner to support all pupils but provide more intensive nurture support to those who show signs of struggling with their mental health.

Who is best suited to deliver school-based health and well-being interventions, school staff or external mental health professionals?

When it comes to advising educators and researchers about optimal intervention delivery in terms of who should be leading health and well-being interventions, we are presented with a clearer picture. The majority of health and well-being interventions included in the review were delivered by school staff, an unsurprising finding as the majority of interventions are designed to be delivered by teachers when they are implemented through educational institutions. All the studies included in this review that investigated the PATHS, Incredible Years, SEAL, Paws B, and Roots of Empathy program were delivered by school staff, mainly class teachers. It was thought that in many studies, teachers were able to successfully implement health and well-being interventions with their students due to the fact that they were able to weave the teachings of health and well-being interventions into all areas of learning (Williams et al., 2019), and crucially when teachers deliverer health and well-being interventions it can strengthen the bond between teachers and pupils (Hutchings et al., 2007), which can further improve student well-being (Wang, Degol, Amemiya, Parr & Guo, 2020). However, none of the investigations of the interventions listed included a comparison between teacher led versus practitioner led implementation, meaning no conclusions can be drawn about who is best to deliver health and well-being interventions. 2 interventions, Think, Feel, Do and FRIENDS investigated

the impact of their respective programs when delivered by school nurses. 4 out of 5 investigations of the FRIENDS programs were delivered by school nurses, and the positive outcomes from such investigations were thought to be related to the nurses' in-depth knowledge of health and well-being combined with their familiarity with the pupils (Stallard et al., 2005, 2007, 2008, 2014). One evaluation of Think, Feel, Do (Attwood e al., 2012) investigated the intervention when led by a school nurse and a health and well-being researcher. Positive outcomes were found in both conditions, but no direct comparison between the intervention leads was undertaken. Two investigations in this rapid review involved a direct comparison between teacher led interventions versus practitioner led interventions. One investigation of FRIENDS found that a greater reduction in anxiety was seen in the health practitioner led condition versus the teacher led condition (Stallard et al., 2014). This was thought to be due to the program not being covered in full in the teacher led condition. Finally, in the unnamed CBT intervention investigation, no significant differences were found between the teacher led versus school psychologist conditions, except for the fact that greater improvements were seen in the teacher led condition for the healthy coping skills outcome (Collins et al., 2014).

The evidence presented suggests that teachers are better suited to delivering school-based health and well-being interventions due to their ability to thoroughly embed health and well-being programs across the school, their ability to connect and further strengthen their relationships with their pupils, and the fact that when teachers deliver health and well-being interventions, it is more likely to be a cost effective and long-term decision. However, there is evidence to suggest that school nurses and health practitioners are also a viable option when it comes to delivering health and well-being education due to their knowledge of child well-being. Teaching staff likely do not possess such extensive knowledge and further may not have the time or capacity to deliver health and well-being interventions comprehensively. However, not all primary schools across the UK employ school nurses, so the suggestion that all schools deliver health and well-being content via such individuals is not practical. Instead, based on the investigations included in this review, it is recommended that class teachers deliver health and well-being interventions, but with the support of an individual who is knowledgeable about child health and wellbeing and who is also familiar with the school's pupils. For those schools who employ them, school nurses could work to support class teachers and for those without school nurses, the school's designated health and well-being lead should

support the class teacher in all matters relating to physical and emotional health, including intervention delivery. This way teachers can continue to embed health and well-being in a cross-curricular manner, whilst being supported by individuals who possess a wealth of knowledge about the subject, thus removing some of the burden from teachers who would otherwise lack the time and capacity to deliver interventions unsupported. This recommendation is further supported by the Welsh Government (2021) guidance, whereby it is recommended that educational institutions adopt a whole-school approach to health and well-being, where each staff member is committed to embedding well-being at the heart of learning. It also states that the whole-school approach is contingent on positive student-teacher relationships. Both factors are able to be better promoted when teaching staff are the ones implementing health and well-being interventions. The document further states that institutions in Wales should identify a chief implementation lead to support their colleagues in the delivery of health and well-being education, which is in line with the recommendations of the current research, that teaching staff seek the support of the designated health and well-being lead or school nurse when implementing health and well-being programs.

Strengths, limitations and implications for future research

This review presents several strengths and weaknesses that both promote and limit this piece of literature. Firstly, this is one of the only comprehensive rapid reviews to be conducted assessing the scope and evidence based of UK primary school-based health and well-being interventions. It also marks the first attempt known by the researcher to provide recommendations to educators and policy makers in the UK regarding optimal intervention delivery in terms of two crucial factors; who is best suited to lead health and well-being interventions, and who is best suited to receive them. It addresses a critical gap in the research, providing an updated review of the current health and well-being programs being run in British primary schools, and includes research as recent as 2019. Secondly, the conclusions from this review may be used to inform policy and practice surrounding child health and well-being educational practices in UK schools, an issue that is particularly pressing in the wake of the COVID-19 pandemic. Thirdly, guidance published by the Welsh government (2021) recommends that institutions adopt a whole school approach to well-being, where universal and targeted interventions are delivered based on the needs of the pupils, so long as the interventions implemented are well evidenced. This review therefore

provides teachers in Wales with a comprehensive guide to which health and well-being programs currently available have the best supporting body of evidence and the quality of this evidence, in order to select a health and well-being intervention that will allow them to achieve the government supported whole-school approach.

However, this review is limited by its failure to include enough studies from across the UK. Most studies in the review were conducted in England or Wales, meaning that review conclusions may not easily lend themselves to the nations of Scotland and Northern Ireland due to their underrepresentation within the dataset. The rapid review also aimed to provide the scope of all major health and well-being interventions currently being carried out in the UK. However, as there is a large discrepancy in the literature between interventions currently being carried out, and evaluations of these interventions, it may be that this review fails to accurately reflect the scale and extent to which certain interventions are truly being carried out, and instead merely represents the extent to which they have been evaluated. As it takes time for newly developed interventions to be implemented and reviewed, this study has likely missed several more modern health and well-being interventions that are currently underway, particularly those that have been put in place post-pandemic. Furthermore, the Down's and Black checklist was utilised by the researcher as the methodology of the review was largely based on the methodology of the Mackenzie and Williams (2018) paper, so that direct comparisons could be made between the results of the paper and this Master's thesis. Although the Down's and Black (1998) checklist is a useful tool for assessing the quality of both randomised and non-randomised studies, the scale was developed for use with quantitative studies. The researcher chose not to exclude qualitative research from the rapid review because it allows access to a rich source of data, however, it may not have been appropriate to use the Down's and Black checklist to assess the quality of such qualitative studies. The researcher chose to use the Down's and Black (1998) checklist consistently, so that comparison could be easily drawn between qualitative and quantitative research in terms of its methodological quality, and because the majority of qualitative research investigations included in this review form part of larger quantitative papers. However, the use of an assessment tool that has been specifically designed to evaluate the quality of qualitative research, such as that created by Long and Godfrey (2004) would have provided a more accurate reflection of the value and quality of the qualitative research included in this review.

Future research should seek to continue to investigate the use and evidence base of health and well-being program across the UK but focus specifically on the nations of Scotland, Wales and Northern Ireland. Each nation has a different approach to health and well-being, therefore researchers should seek to investigate how differences in policy are reflected in the different well-being interventions utilised in each nation, especially in the wake of changes to the curriculum, such as the 2022 new curriculum for Wales (Welsh Government, 2020a). research should also continue to investigate the success of health and well-being interventions in the wake of the COVID-19 pandemic. As the most recent study included in this rapid review was from 2020, none of the interventions were implemented during or after the outbreak of the virus. As the pandemic is likely to have a negative impact on the mental well-being of young people for years to come (Banks et al., 2021) it is vital that researchers continue to assess the content, outcomes and evidence base of health and well-being programs across the UK to assess their efficacy during such a crucial period. Furthermore, reviews should continue to utilized both quantitative and qualitative research in order to gain a comprehensive understanding of the effectiveness of health and well-being programs but should include appropriate quality assessment tools.

## Conclusion

To conclude, UK wide school-based health and well-being programs may be widely used, but few rigorous investigations exist to support the evidence base of such interventions. Research so far has mainly been conducted in England, with relatively few studies investigating the impacts of health and well-being programs in Wales, Scotland or Northern Ireland. Social and Emotional Learning interventions, such as PATHS, and Cognitive Behavioural Therapy interventions, such as FRIENDS, are the most widely used health and well-being curriculums in the UK. CBT-based programs also appear to be the most well supported health and wellbeing interventions. However, the methodological weaknesses associated with such interventions, and the mixed quality of the evidence presented mean that the extent to which such programs can be fully endorsed is limited. Indeed, although many of the investigations included in this rapid review report largely positive findings, there appeared to be a general trend of low-quality studies reporting positive intervention outcomes, and studies rated as high-quality reporting insignificant intervention impacts. Very few studies were both of high quality and reported positive

impacts. This highlights the importance of continuing to conduct high quality, rigorous investigations of school-based health and well-being programs in the UK, so that we may accurately assess the evidence base supporting each intervention to advise practitioners and policy makers. If in future a greater number of high-quality studies that report positive impacts emerge, then these studies should guide the decisions of researchers, practitioners, school staff and educational leads in terms of the best health and well-being interventions to implement with primary aged children, however, educators and well-being leads should take into consideration the emotional needs of their students as a whole before selecting a well-evidenced program. In terms of optimal intervention delivery, the picture is unclear. The evidence at present suggests that universal intervention delivery is the best option currently available to schools because this method can reduce stigma and thoroughly embed the teachings of health and well-being interventions across the school and all areas of learning. However, educators and researchers should continue to monitor universal intervention's ability to impact students who are 'high risk' in terms of their mental well-being, and if such a method of delivery is not sufficient to reach such students, then a more intensive targeted version of the program should be considered. Furthermore, when it comes to who is best placed to lead school-based health and well-being interventions, the evidence presented in this review suggests that teachers are the most cost-effective choice, with teacher-led interventions thought to increase the longitudinal success of health and wellbeing interventions and strengthen the bond between educators and pupils. However, educators who have gaps in their knowledge about health and well-being, or lack the time and capacity to deliver such interventions due to competing demands, should be supported by personnel who have the capacity and breadth of knowledge to do so, such as school nurses and health and well-being leads.

**References**

Adi, Y., Killoran, A., Janmohamed, K., & Stewart-Brown, S. (2007). Rapid review of the effectiveness of interventions to promote mental well-being in children in primary education. Report 1: Universal approaches: non-violence related outcomes. *Database of Abstracts of Reviews of Effects (DARE): Quality-assessed Reviews [Internet]*.

Agarwal, P., Kaushik, A., Sarkar, S., Rao, D., Mukherjee, N., Bharat, V., ... & Saha, A. K. (2021). Global survey-based assessment of lifestyle changes during the COVID-19 pandemic. *Plos one*, *16*(8), e0255399.

Alibali, M. W., & Nathan, M. J. (2010). Conducting research in schools: A practical guide. *Journal of Cognition and Development*, *11*(4), 397-407.

Attwood, M., Meadows, S., Stallard, P., & Richardson, T. (2012). Universal and targeted computerised cognitive behavioural therapy (Think, Feel, Do) for emotional health in schools: results from two exploratory studies. *Child and Adolescent Mental Health*, *17*(3), 173-178.

Banerjee, R., Weare, K., & Farr, W. (2014). Working with 'Social and Emotional Aspects of Learning'(SEAL): Associations with school ethos, pupil social experiences, attendance, and attainment. *British educational research journal*, *40*(4), 718-742

Banks, J., Fancourt, D., & Xu, X. (2021). Mental health and the COVID-19 pandemic. *World happiness report*, *2021*, 107-130.

Barry, M. M., Clarke, A. M., & Dowling, K. (2017). Promoting social and emotional well-being in schools. *Health Education*.

Belfer, M. L. (2008). Child and adolescent mental disorders: the magnitude of the problem across the globe. *Journal of child psychology and psychiatry*, *49*(3), 226-236.

Berry, V., Axford, N., Blower, S., Taylor, R. S., Edwards, R. T., Tobin, K., ... & Bywater, T. (2016). The effectiveness and micro-costing analysis of a universal, school-based, social–emotional learning programme in the UK: A cluster-randomised controlled trial. *School Mental Health*, *8*, 238-256.

Borrelli, B. (2011). The assessment, monitoring, and enhancement of treatment fidelity in public health clinical trials. *Journal of public health dentistry*, *71*, S52-S63.

Broekkamp, H., & van Hout-Wolters, B. (2007). The gap between educational research and practice: A literature review, symposium, and questionnaire. *Educational research and evaluation*, *13*(3), 203-220.

Bryman, A., Becker, S., & Sempik, J. (2008). Quality criteria for quantitative, qualitative and mixed methods research: A view from social policy. *International journal of social research methodology*, *11*(4), 261-276.

Cain, T. (2016). Research utilisation and the struggle for the teacher's soul: A narrative review. *European Journal of Teacher Education*, *39*(5), 616-629.

Caldwell, D. M., Davies, S. R., Hetrick, S. E., Palmer, J. C., Caro, P., López-López, J. A., ... & Welton, N. J. (2019). School-based interventions to prevent anxiety and depression in children and young people: a rapid review and network meta-analysis. *The Lancet Psychiatry*, *6*(12), 1011-1020.

Carroll, C., Patterson, M., Wood, S., Booth, A., Rick, J., & Balain, S. (2007). A conceptual framework for implementation fidelity. *Implementation science*, *2*, 1-9.

Clarke, A. M., Bunting, B., & Barry, M. M. (2014). Evaluating the implementation of a school-based emotional well-being programme: a cluster randomized controlled trial of Zippy's Friends for children in disadvantaged primary schools. *Health education research*, *29*(5), 786-798.

Clarke, A., Sorgenfrei, M., Mulcahy, J., Davie, P., Friedrich, C., & McBride, T. (2021). Adolescent mental health. *A rapid review on the effectiveness of school-based intervention. London: Early Intervention Foundation*.

Collins, K. A., & Dozois, D. J. (2008). What are the active ingredients in preventative interventions for depression?. *Clinical Psychology: Science and Practice*, *15*(4), 313.

Collins, S., Woolfson, L. M., & Durkin, K. (2014). Effects on coping skills and anxiety of a universal school-based mental health intervention delivered in Scottish primary schools. *School Psychology International*, *35*(1), 85-100.

Connolly, P., Miller, S., Kee, F., Sloan, S., Gildea, A., McIntosh, E., & Bland, J. M. (2018). A cluster randomised controlled trial and evaluation and cost-effectiveness analysis of the Roots of Empathy schools-based programme for improving social and emotional well-being outcomes among 8-to 9-year-olds in Northern Ireland. *Public Health Research*.

Copeland, W. E., Shanahan, L., Costello, E. J., & Angold, A. (2009). Childhood and adolescent psychiatric disorders as predictors of young adult disorders. *Archives of general psychiatry*, *66*(7), 764-772.

Curtis, C., & Norgate, R. (2007). An evaluation of the promoting alternative thinking strategies curriculum at key stage 1. *Educational Psychology in practice*, *23*(1), 33-44.

Department For Education (2017, December). *Transforming Children and Young People's Mental Health Provision: a Green Paper*. Retrieved from Transforming_children_and_young_people_s_mental_health_provision.pdf (publishing.service.gov.uk)

Department For Education (2017, December). *Transforming Children and Young People's Mental Health Provision: a Green Paper*. Retrieved from Transforming_children_and_young_people_s_mental_health_provision.pdf (publishing.service.gov.uk)

Department For Education (2019, June 25). *Relationships and sex education (RSE) and health education*. Retrieved from Relationships Education, Relationships and Sex Education and Health Education guidance (publishing.service.gov.uk)

Department For Education (2021, March 3). *Children & Young People's Emotional Health and Well-being in Education Framework (Easy Read).* Retrieved from Children & Young People's Emotio2nal Health and Well-being in Education Framework (Easy Read) | Department of Education (education-ni.gov.uk)

Domitrovich, C. E., Bradshaw, C. P., Greenberg, M. T., Embry, D., Poduska, J. M., & Ialongo, N. S. (2010). Integrated models of school-based prevention: Logic and theory. *Psychology in the Schools*, *47*(1), 71-88.

Downs, S. H., & Black, N. (1998). The feasibility of creating a checklist for the assessment of the methodological quality both of randomised and non-randomised studies of health care interventions. *Journal of epidemiology & community health*, *52*(6), 377-384.

Dray, J., Bowman, J., Campbell, E., Freund, M., Wolfenden, L., Hodder, R. K., ... & Wiggers, J. (2017). Rapid review of universal resilience-focused interventions targeting child and adolescent mental health in the school setting. *Journal of the American Academy of Child & Adolescent Psychiatry*, *56*(10), 813-824.

Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child development*, *82*(1), 405432.

Eisner, M. (2009). No effects in independent prevention trials: can we reject the cynical view?. *Journal of experimental Criminology*, *5*, 163-183.

Fadus, M. C., & Harrison, J. D. (2019). A missed opportunity: universal school-based mental Health literacy programs. *Academic Psychiatry*, *43*, 457-460.

Fenwick-Smith, A., Dahlberg, E. E., & Thompson, S. C. (2018). Rapid review of resilience-enhancing, universal, primary school-based mental health promotion programs. *BMC psychology*, *6*, 1-17.

Greenberg, M. T. (2010). School-based prevention: current status and future challenges. *Effective Education*, *2*(1), 27-52.

Guvå, G., & Hylander, I. (2012). Diverse perspectives on pupil health among professionals in school-based multi-professional teams. *School Psychology International*, *33*(2), 135-150.

Hallam, S. (2009). An evaluation of the Social and Emotional Aspects of Learning (SEAL) programme: promoting positive behaviour, effective learning and well-being in primary school children. *Oxford Review of Education*, *35*(3), 313-330.

Hamre, B. K., & Pianta, R. C. (2001). Early teacher–child relationships and the trajectory of children's school outcomes through eighth grade. *Child development*, *72*(2), 625-638.

Headley, C., & Campbell, M. (2011). Teachers' recognition and referral of anxiety disorders in primary school children. *Australian Journal of Educational and Developmental Psychology*, *11*, 78-90.

Hemsley-Brown, J., & Sharp, C. (2003). The use of research to improve professional practice: A rapid review of the literature. *Oxford review of education*, *29*(4), 449-471.

Humphrey, N. (2013). Social and emotional learning: A critical appraisal. *Social and Emotional Learning*, 1-184.

Humphrey, N., Barlow, A., Wigelsworth, M., Lendrum, A., Pert, K., Joyce, C., ... & Turner, A. (2016). A cluster randomized controlled trial of the Promoting Alternative Thinking Strategies (PATHS) curriculum. *Journal of school psychology*, *58*, 73-89.

Hutchings, J., Bywater, T., Gridley, N., Whitaker, C. J., Martin-Forbes, P., & Gruffydd, S. (2012). The incredible years therapeutic social and emotional skills programme: A pilot study. School Psychology International, 33(3), 285-293.

Hutchings, J., Daley, D., Jones, K., Martin, P., Bywater, T., & Gwyn, R. (2007). Early results from developing and researching the Webster-Stratton incredible years teacher classroom management training programme in North West Wales. *Journal of Children's Services*.

Hutchings, J., Lane, E., Owen, R. E., & Gwyn, R. (2004). The introduction of the Webster-Stratton classroom dinosaur school programme in Gwynedd, North Wales: A pilot study. *Educational and Child Psychology*, *21*(4), 4-15.

Hutchings, J., Martin-Forbes, P., Daley, D., & Williams, M. E. (2013). A randomized controlled trial of the impact of a teacher classroom management program on the classroom behavior of children with and without behavior problems. *Journal of school psychology*, *51*(5), 571-585.

Inam, A., Tariq, P. N., & Zaman, S. (2015). Cultural adaptation of preschool PATHS (Promoting Alternative Thinking Strategies) curriculum for Pakistani children. *International Journal of Psychology*, *50*(3), 232-239.

Johnstone, K. M., Kemps, E., & Chen, J. (2018). A meta-analysis of universal school-based prevention programs for anxiety and depression in children. *Clinical child and family psychology review*, *21*, 466-481.

Jones, S.M. and Bouffard, S.M. (2012),“Social and emotional learning in schools: from programsto strategies: social policy report”,Society for Research in Child Development, Vol. 26 No. 4,pp. 3-22.

Kauhanen, L., Wan Mohd Yunus, W. M. A., Lempinen, L., Peltonen, K., Gyllenberg, D., Mishina, K., ... & Sourander, A. (2022). A rapid review of the mental health changes of children and young people before and during the COVID-19 pandemic. *European child & adolescent psychiatry*, 1-19.

Kelly*, B., Longbottom, J., Potts, F., & Williamson, J. (2004). Applying emotional intelligence: Exploring the promoting alternative thinking strategies curriculum. *Educational Psychology in Practice*, *20*(3), 221-240.

Kelvin (2014, March 25). *Mental health help 'needed in schools'*. Retrieved from Mental health help 'needed in schools' - BBC News

Kendall, P. C., Safford, S., Flannery-Schroeder, E., & Webb, A. (2004). Child anxiety treatment: outcomes in adolescence and impact on substance use and depression at 7.4-year follow-up. *Journal of consulting and clinical psychology*, *72*(2), 276.

Kooth (2020, April 27). *How has COVID-19 Affected the Mental Health of Children and Young People in the United Kingdom?* Retrieved from Kooth infographic COVID affecting mental health of YP (2).pdf

Kumar, A., & Nayar, K. R. (2021). COVID 19 and its mental health consequences. *Journal of Mental Health*, *30*(1), 1-2.

Liddle, I., & Macmillan, S. (2010). Evaluating the FRIENDS programme in a Scottish setting. *Educational Psychology in Practice*, *26*(1), 53-67.

Little, M., Berry, V. L., Morpeth, L., Blower, S., Axford, N., Taylor, R., ... & Tobin, K. (2012). The impact of three evidence-based programmes delivered in public

systems in Birmingham, UK. *International Journal of Conflict and Violence*, *6*(2), 260-272.

Long, A. F., & Godfrey, M. (2004). An evaluation tool to assess the quality of qualitative research studies. *International Journal of social Research methodology*, *7*(2), 1811.

Mackenzie, K., & Williams, C. (2018). Universal, school-based interventions to promote mental and emotional well-being: What is being done in the UK and does it work? A rapid review. *BMJ open*, *8*(9), e022560.

March, S., Spence, S. H., & Donovan, C. L. (2008). The efficacy of an internet-based cognitive-behavioral therapy intervention for child anxiety disorders. *Journal of pediatric psychology*, *34*(5), 474-487.

Mayo Clinic (2023). *Mental illness in children: Know the signs*. Retrieved from Mental illness in children: Know the signs - Mayo Clinic

Mental Health Foundation (2022, February). *The economic case for investing in the prevention of mental health conditions in the UK*. Retrieved from MHF-Investing-in-Prevention-Full-Report.pdf (mentalhealth.org.uk)

Miller, D. N., & Jome, L. M. (2010). School psychologists and the secret illness: Perceived knowledge, role preferences, and training needs regarding the prevention and treatment of internalizing disorders. *School Psychology International*, *31*(5), 509-520.

Molins, N. C., & Clopton, J. R. (2002). Teachers' reports of the problem behavior of children in their classrooms. *Psychological reports*, *90*(1), 157-164.

National Assembly for Wales (2018, April). *Mind over Matter*. Retrieved from The Emotional and Mental Health of Children and Young People in Wales (senedd.wales)

Nelson, J., & Campbell, C. (2017). Evidence-informed practice in education: Meanings and applications. *Educational Research*, *59*(2), 127-135.

NHS Digital (2020, October 22). *Mental health of Children and Young People in England, 2020; Wave 1 follow up to the 2017 survey*. Retrieved from Mental

Health of Children and Young People in England, 2020: Wave 1 follow up to the 2017 survey - NDRS (digital.nhs.uk)

Panayiotou, M., Humphrey, N., & Hennessey, A. (2020). Implementation matters: Using complier average causal effect estimation to determine the impact of the **Promoting Alternative Thinking Strategies (PATHS) curriculum on children's** quality of life. *Journal of Educational Psychology*, *112*(2), 236

Panayiotou, M., Humphrey, N., & Wigelsworth, M. (2019). An empirical basis for linking social and emotional learning to academic performance. *Contemporary Educational Psychology*, *56*, 193-204.

Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental health of young people: a global public-health challenge. *The Lancet*, *369*(9569), 1302-1313.

Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., & Pachan, M. (2008). The Positive Impact of Social and Emotional Learning for Kindergarten to Eighth-Grade Students: Findings from Three Scientific Reviews. Technical Report. *Collaborative for Academic, Social, and Emotional Learning (NJ1)*.

Pegram, J., Watkins, R. C., Hoerger, M., & Hughes, J. C. (2022). Assessing the range and evidence-base of interventions in a cluster of schools. *Review of Education*, *10*(1), e3336.

Popay, J., Roberts, H., Sowden, A., Petticrew, M., Arai, L., Rodgers, M., ... & Duffy, S. (2006). Guidance on the conduct of narrative synthesis in rapid reviews. *A product from the ESRC methods programme Version*, *1*(1), b92.

PSHE Association (2021). *Health and Well-being Education in Scotland*. Retrieved from Health and Well-being education in Scotland (pshe-association.org.uk)

Robson, C., Leyera, R. U., Testoni, S., Miranda Wolpert, S. T., Ullman, R., Testoni, S., ... & Deighton, J. (2019). Universal approaches to improving children and young **people's mental health and well**-being: Report of the findings of a Special Interest Group.

Ross, S. M., Sheard, M. K., Cheung, A., Elliott, L., & Slavin, R. (2011). Promoting **primary pupils' social**-emotional learning and pro-social behaviour: longitudinal evaluation of the Together 4 All Programme in Northern Ireland. *Effective Education*, *3*(2), 61-81.

Saloviita, T., & Pakarinen, E. (2021). Teacher burnout explained: Teacher-, student-, and organisation-level variables. *Teaching and Teacher Education*, *97*, 103221.

See, B. H. (2018). 'Evaluating the evidence in evidence-based policy and practice: Examples from rapid reviews of literature. Research in Education, 102(1), 37–61.

See, B. H., & Gorard, S. (2020). Effective classroom instructions for primary literacy: A critical review of the causal evidence. *International Journal of Educational Research*, *102*, 101577.

Slavin, R. E. (2017). Evidence-based reform in education. *Journal of Education for Students Placed at Risk (JESPAR)*, *22*(3), 178-184.

Spence, S. H., Holmes, J. M., March, S., & Lipp, O. V. (2006). The feasibility and outcome of clinic plus internet delivery of cognitive-behavior therapy for childhood anxiety. *Journal of consulting and clinical psychology*, *74*(3), 614.

Stallard, P. (2013). School-based interventions for depression.

Stallard, P., Sayal, K., Phillips, R., Taylor, J. A., Spears, M., Anderson, R., ... & Montgomery, A. A. (2012). Classroom based cognitive behavioural therapy in reducing symptoms of depression in high risk adolescents: pragmatic cluster randomised controlled trial. *Bmj*, *345*.

Stallard, P., Simpson, N., Anderson, S., & Goddard, M. (2008). The FRIENDS emotional health prevention programme. European child & adolescent psychiatry, 17(5), 283-289.

Stallard, P., Simpson, N., Anderson, S., Carter, T., Osborn, C., & Bush, S. (2005). An evaluation of the FRIENDS programme: A cognitive behaviour therapy intervention to promote emotional resilience. *Archives of disease in childhood*, *90*(10), 1016-1019.

Stallard, P., Simpson, N., Anderson, S., Hibbert, S., & Osborn, C. (2007). The FRIENDS emotional health programme: Initial findings from a school-based project. *Child and Adolescent Mental Health*, *12*(1), 32-37.

Stallard, P., Taylor, G., Anderson, R., Daniels, H., Simpson, N., Phillips, R., & Skryabina, E. (2014). The prevention of anxiety in children through school-based interventions: study protocol for a 24-month follow-up of the PACES project. *Trials*, *15*(1), 1-6.

The Future Generations Commissioner for Wales (2015). *Well-being of Future Generations (Wales) Act 2015.* Retrieved from Well-being of Future Generations (Wales) Act 2015 – The Future Generations Commissioner for Wales

Thomas, G., & Atkinson, C. (2016). Measuring the effectiveness of a mindfulness-based **intervention for children's attentional functioning.** *Educational & Child Psychology*, *33*(1), 51-64.

Tomé, G., Almeida, A., Ramiro, L., & Gaspar, T. (2021). Intervention in schools promoting mental health and well-being: a rapid. *Global Journal of Community Psychology Practice*, *12*(1).

Toomey, E., Hardeman, W., Hankonen, N., Byrne, M., McSharry, J., Matvienko-Sikar, K., & Lorencatto, F. (2020). Focusing on fidelity: narrative review and recommendations for improving intervention fidelity within trials of health behaviour change interventions. *Health Psychology and Behavioral Medicine*, *8*(1), 132-151.

van Schaik, P., Volman, M., Admiraal, W., & Schenke, W. (2018). Barriers and **conditions for teachers' utilisation of academic knowled**ge. *International Journal of Educational Research*, *90*, 50-63.

Vickery, C. E., & Dorjee, D. (2016). Mindfulness training in primary schools decreases negative affect and increases meta-cognition in children. *Frontiers in psychology*, *6*, 2025.

Walker, M., Nelson, J., & Bradshaw, S. (2019). Teachers' Engagement with Research: What Do We Know? A Research Briefing. *Education Endowment Foundation*.

Wang, M. T., Degol, J. L., Amemiya, J., Parr, A., & Guo, J. (2020). Classroom climate **and children's academic and psyc**hological well-being: A rapid review and meta-analysis. Developmental Review, 57, Article 100912.

Weare, K., & Nind, M. (2011). Mental health promotion and problem prevention in schools: what does the evidence say?. *Health promotion international*, *26*(suppl_1), i29-i69.

Webster-Stratton, C. (2011). How to Promote Children's Social and Emotional Compe-tence. London: Paul Chapman Publishing.

Wells, J., Barlow, J., & Stewart-Brown, S. (2003). A rapid review of universal approaches to mental health promotion in schools. *Health education*, *103*(4), 197-220.

Welsh Government (2015, June 23). *Well-being of Future Generations (Wales) Act 2015: the essentials*. Retrieved from Well-being of Future Generations (Wales) Act 2015: the essentials [HTML] | GOV.WALES

Welsh Government (2020a). *Curriculum for Wales*. Retrieved from Curriculum for Wales - Hwb (gov.wales)

Welsh Government (2020b). *Health and Well-being*. Retrieved from Health and Well-being: Introduction - Hwb (gov.wales)

Welsh Government (2021, March 15). *Framework on embedding a whole-school approach to emotional and mental well-being.* Retrieved from WG42005 (gov.wales)

Welsh Government (2022). *The additional learning needs transformation programme: frequently asked questions*. Retrieved from The additional learning needs transformation programme: frequently asked questions | GOV.WALES

Werner-Seidler, A., Spanos, S., Calear, A. L., Perry, Y., Torok, M., O'Dea, B., ... & Newby, J. M. (2021). School-based depression and anxiety prevention programs: An updated rapid review and meta-analysis. *Clinical Psychology Review*, *89*, 102079.

Wigelsworth, M., Lendrum, A., Oldfield, J., Scott, A., Ten Bokkel, I., Tate, K., & Emery, C. (2016). The impact of trial stage, developer involvement and international

transferability on universal social and emotional learning programme outcomes: A meta-analysis. *Cambridge Journal of Education*, *46*(3), 347-376.

Williams, M., Bywater, T. J., Lane, E., Williams, N., & Hutchings, J. (2019). Building social and emotional competence in school children: A randomised controlled trial. *Psychology*, 107-121.

Williams, M., Bywater, T. J., Lane, E., Williams, N., & Hutchings, J. (2019). Building social and emotional competence in school children: A randomised controlled trial. *Psychology*, 107-121.

Wilson, S. J., & Lipsey, M. W. (2007). School-based interventions for aggressive and disruptive behavior: Update of a meta-analysis. *American journal of preventive medicine*, *33*(2), S130-S143.

Woolf, A. M. (2013). Social and Emotional Aspects of Learning: teaching and learning or playing and becoming?. *Pastoral Care in Education*, *31*(1), 28-42.

World Health Organization. (2004). Prevention of mental disorders: Effective interventions and policy options: Summary report.

# Appendix

Appendix 1: Downs and black checklist

Downs and Black checklist - quality assessment.xlsx

Appendix 2: Overview of all studies included in the rapid review

| Author/date | location | Intervention | School type | Intervention lead | Intervention type | Outcome | Summary |
|---|---|---|---|---|---|---|---|
| Humphrey et al., (2016) | England | PATHS | Primary | Teacher | Universal | Mixed | RCT study of PATHS examining the interventions impact on pupil socio-emotioal intelligence and mental wellbeing. 4516 pupils (aged 7-9) from 45 English primary schools were allocated to a teacher led PATHS intervention or usual provision control condition. |
| Berry et al., (2016) | UK | PATHS | Primary | Teacher | Universal | Negative | RCT and observational study of PATHS investigating the impact of the program on children's emotional wellbeing. 5074 pupils (aged 4-6) from 56 primary schools were randomly assigned to a teacher led PATHS intervention or control condition. |
| Little et al., (2012) | England | PATHS | Primary | Teacher | Universal | Mixed | RCT of PATHS examining the programs imapact on pupil's emotional wellbeing and behaviour. 5397 pupils (aged 4-6) from 56 primary schools in Birmigham were randomly assigned to a teacher led PATHS intervention or control condition. |
| Curtis & Norgate (2007) | UK | PATHS | Primary | Teacher | Universal | Positive | Mixed methods study of PATHS involving a pre-post test design with matched pairs control group quantitaive arm and a teacher interview qualitative arm. The research examined the interventions impact on the social and emotional wellbeing of 287 primary aged pupils from 5 schools. |
| Kelly et al., (2004) | Scotland | PATHS | Primary | Teacher | Universal | Positive | Exploratory qualitative investigation of PATHS examining school staff and pupil's impressions and oppinions of the program, as well as the impact the program had on the emotional wellbeing of class of pupils (aged 9-10) in a primary school in Strathclyde. |
| Panayiotou et al., (2020) | England | PATHS | Primary | Teacher | Universal | Mixed | RCT investigating the impact of PATHS on pupils mental wellbeing, social support and school community. 5218 pupils (aged 7-9) from 45 primary schools were randomly assigned to a teacher led PATHS intervention or usual provision control condition. |
| Panayiotou et al., (2019) | UK | PATHS | Mixed | Teacher | Universal | Negative | Longitudinal study involving 1626 pupils (aged 9=12) from 45 schools, investigating the association between social and emotional learning and academic attainment, and whether the PATHS social and emotional learning program would influence this relationship. |
| Sheard et al., (2012) | Northern Ireland | PATHS | Primary | Unclear | Universal | Mixed | Mixed methods RCT of Together all 4, a version of the PATHS curriculum that was adapted to fit the cultural needs of primary schools in Northern Ireland. Interviews, observations and psychometric assessments were used to assess the programs impact on the socio-emotional wellbeing of pupils and program experiences and evaluations of school staff, parents and guardians from 12 schools that were randomly assigned to a teacher lead intervention or control condition. |
| Hallam (2009) | UK | SEAL | Primary | Teacher | Universal | Positive | Pre-post test assessment data in the form of questionnaires and interviews was collected from teachers, pupils, school staff and headteachers concerning their experiences and oppinions of the SEAL social and emotional learning program. |
| Banerjee et al., (2014) | UK | SEAL | Mixed | Teacher | Universal | Positive | Mixed methods study of SEAL that utilised semi-structured interveiws, observations, questionnaires, and school statiscitcs to investigate the impact of the program on the peer intersocial interactions, school community, academic attainment and attendance rates of 2242 students in 49 primary and secondary schools. |
| Attwood et al., (2012) | England | CBT (Think, Feel, Do) | Primary | Researcher or School nurse | Universal and Targeted | Positive | 2 part study investigating the impact of an online version of the CBT program Think, Feel, Do. In study 1 the program was provided universally to 13 students assigned to a control or researcher led intervetnion condition. I study 2 12 students who were identified as having significant emotional or behavioural difficulties recivied the intervention from a trained school nurse. |
| Collins et al., (2014) | Scotland | Unnamed CBT intervention | Primary | Teacher or Psychologist | Universal | Positive | RCT investigating the imapact of an unnamed CBT based universal intervention on the coping strategies and anxiety levels of young students. 317 students (aged 9-10) were randomly allocated to a pyschologist delivered intervention, teacher delivered intervention or control condition. |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Conolly et al., (2018) | Northern Ireland | Roots of Empathy | Primary | Teacher | Universal | Mixed | RCT of the Roots of Empathy curriculum to investigate the imapct of the program on children's capacity for empathy. 1278 pupils (aged 8-9) from 74 schools in Northern Ireland were randomly assigned to either a teacher led Roots of Empathy intervention or waitlist control condition. |
| Hutchings et al., (2004) | Wales | The Incredible Years | Primary | Teacher | Universal | Positive | Pilot study of The Incredible Years intervention which utilised interviews and pre-post test psychometiric assesments to examine the experiences of teachers who delivered the program, the opinions and thoughts of parents, and theimpacts of the program on the behaviour, social and problem solving skills of 8 recpetion children in a primary school class in North West Wales. |
| Hutchings et al., (2007) | Wales | The Incredible Years | Primary | Teacher | Universal | Positive | 2 part study examining teachers experiences of The Incredible Years classroom management program. In the first part of the study teachers completed questionnaires and interviews that aimed to investigate teacher's thoughts about the usefulness and their enjoyment of the program. In the second part of the study observations of teachers took place to assess the programs impact on their ability to give precise intstructions, allow appropriate response times, and on class compliance. |
| Hutchings et al., (2013) | Wales | The Incredible Years | Primary | Teachers | Universal | Positive | RCT of The Incredible Years program to investigate the impact on educator and pupil behaviour. 12 teachers and 107 pupils (aged 3-7) were randonly assigned to an Incredible Years intervention or control condition. |
| Hutchings et al., (2012) | Wales | The Incredible Years | Primary | Teacher | Targeted | Mixed | Pilot study of the targeted version of The Incredible Years program, the theraputic dinosaur school intervention. 24 students (aged 5-9) who were identified as high risk by school staff were assigned to an intervention or control condition to assess the interventions impact on the students emotional wellbeing and problem solving skills. |
| Hutchings et al., (2019) | Wales | The Incredible Years | Primary | Teacher | Targeted | Mixed | RCT of the targeted version of The Incredible Years program, the theraputic dinosaur school intervention to assess if the program held any additional benefits for students with significant emotional or social challenges. 221 children were identified as high risk by school staff and randomly assigned to an intervention or control condition, where teachers were delivering the standard universal version of The program. |
| Thomas & Atkinson (2016) | England | Mindfulness (Paws B) | Primary | Teacher | Universal | Positive | RCT of the mindfulness school-based intervention Paws B to investigate the impact of the program on children's attentional abilities. 30 primary school pupils (aged 8-9) were randomly assigned to a teacher led Paws B intervetnion or waitlist control condition. |
| Vickery & Dorjee (2016) | UK | Mindfulness (Paws B) | Primary | Teacher | Universal | Positive | Pilot study of Paws B to investigate the impact of the intervention on children's emotional health and wellbeing. 71 students (aged 7-9) from 3 primary schools were assigned to a teacher led Paws B intervention or control condition. |
| Stallard et al., (2005) | UK | FRIENDS | Primary | School Nurse | Universal | Positive | Pre-post test assessment of the FRIENDS program to investigate its impact on children's anxiety levels and self-esteem. 213 students (aged 9-10) from 6 primary schools completed questionnaires and pscyhometric assessments before and after receiving 10 sessions of the FRIENDS program delievered by a school nurse. |
| Stallard et al., (2007) | UK | FRIENDS | Primary | School Nurse | Universal | Positive | Pre-post test assessment of the FRIENDS program to investigate its impact on student's anxiety and self-esteem. 106 students (aged 9-10) from 3 primary schools completed self-report assessments before and after receiving the FRIENDS intervention delivered by a school nurse. |
| Stallard et al., (2014) | England | FRIENDS | Primary | School staff or health practitioner | Universal | Positive | RCT of FRIENDS investigating the programs impact on the anxiety levels and mood of young pupils. 497 students (9-10) from 45 schools were randomly assigned to a teacher led FRIENDS intervention, health practitioner led FRIENDS intervention, or control condition. |
| Stallard et al., (2008) | UK | FRIENDS | Primary | School Nurse | Universal | Positive | pre-post test follow up assessment of a UK based trial of the FRIENDS intervention, to assess its impact on child emotional wellbeing. 106 students (aged 9-10) completed self-reports on measures of anxiety and self-esteem before and after receiving the FRIENDS intervetnion delivered by a school nurse. |
| Liddle & Macmillan (2010) | Scotland | FRIENDS | Mixed | Psychologist | Universal | Positive | pre-post test assessment of the FRIENDS intervention on student's mood, anxiety levels and self-esteem. 95 students (aged 9-14) from 4 schools completed self-report assessments before and after receiving the FRIENDS intervention from a psychologist. |

## Chapter 3: How well does the Connect Curriculum map onto the Health and Well-being AoLE; Welsh Curriculum?

### Literature review

The Connect curriculum

In Chapter 1, it was revealed that the evidence base for the most widely used health and well-being programs in UK schools is relatively weak, with many investigations of health and well-being programs that report positive findings being limited by several methodological flaws. However, it is essential that effective, well-evidenced health and well-being education is delivered in the UK to a high standard, to mitigate the fallout of two major events currently impacting the well-being of young people, the growing mental health crisis (Roffey et al., 2016) and the COVID-19 pandemic (Agarwal et al., 2021). Research has highlighted that the factors of resilience (Song et al., 2021) and psychological flexibility (Dawson & Goliiani-Moghaddam, 2020) may protect people from declining mental well-being in the face of adversity. It has been demonstrated that individuals who exhibit both factors were less likely to experience poor mental well-being, anxiety and stress related to COVID-19 during national lockdown (Belen, 2023; Marchi, Johansson, Sarkadi & Warner, 2021; McCracken, Buhrman, Badinlou & Brocki, 2022). As the impacts of the pandemic are likely to exist for years to come (Banks, Fancourt & Yu, 2021), providing well-being education that aims to build up the resilience and psychological flexibility of young learners may be crucial in order to protect their mental and emotional states. One such school-based health and well-being program that aims to target both of these factors is the Connect curriculum.

Connect is a PSHE program designed for use in primary schools to meet the health and well-being needs of pupils aged 4-11 years old (Connect PSHE, 2021). The program is designed to be taught weekly by class teachers, who are provided with a bank of resources, lesson plans, PowerPoints and activity worksheets when they subscribe to the program. Teachers are provided with training and a curriculum guide to provide them with a background understanding of the psychological models that underpin the curriculum prior to delivering it with their pupils. Connect is available for use in all English-speaking countries, and is currently being

implemented in primary schools across Britain, America, and Australia. The program was created in response to calls to nurture the mental, physical, and emotional health of young people, in light of the increasingly high levels of mental illness now being seen across the globe (Rudd & Beidas, 2020).

## Theoretical underpinnings of the DNA-V model

At the heart of the Connect program lies the DNA-V model (Hayes & Ciarrochi, 2015) which is a developmentally appropriate model for adolescents and children. The DNA-V model teaches the skills necessary to be able to navigate the world in a way that promotes resilience and psychological flexibility (Connect PSHE, 2021). The DNA-V abbreviation helps users and practitioners to remember that all humans are made from the same material, and so with nurture and support, all have the ability to flourish (Hayes & Ciarrochi, 2015). The individual skills that children learn to develop using this model are the Discoverer (D), Noticer (N) and Advisor (A), all of which interact with and are influenced by a child's personal Values (V). The Connect curriculum is based on a wealth of scientific evidence, and the development of the DNA-V model was informed by a range of psychological and educational approaches, including contextual behavioural science, Acceptance and Commitment therapy (ACT) and Positive Psychology (Hayes & Ciarrochi, 2015).

Positive psychology is a psychological discipline that focuses on the positive features of human nature, rather than how we can alleviate or overcome the negative features (Kim, Keck, Miller & Gonzalez, 2012). Positive psychology research generally occurs at three levels; the subjective level, where positive emotions such as joy and contentment are studied, the individual level, where positive character traits such as bravery and compassion are studied, and the group level, where qualities that have a positive impact at the community or societal level, such as selflessness and charity are studied (Boniwell, 2006). There is evidence to suggest that the researched characteristics of positive psychology at the subjective, individual and group level are associated with better health outcomes both mentally and physically (Carr et al., 2021; Michel et al., 2021; Silton et al., 2020). For example, expressing more positive emotion is associated with longer life expectancy, greater resilience and higher pain threshold (Danner, Snowdon & Friesen, 2001; Fredrickson, Tugade, Waugh & Larkin, 2003; Gil et al., 2004), and there is a positive correlation between positive character traits, such as

passion, inquisitiveness, and hope, and a higher quality of life and better mental and physical health (Peterson, Ruch, Beermann, Park & Seligman, 2007; Shimai, Otake, Park, Peterson & Seligman, 2006). The essence of Positive psychology can be seen throughout the DNA-V model, through which educators and practitioners are encouraged to both help children express their natural positive qualities, and channel them, so that children are able to flourish (Hayes & Ciarrochi, 2015).

The DNA-V model also incorporates the theoretical foundations of Contextual Behavioural Science, a logical approach to understanding human behaviour in the context in which it occurs, while overcoming barriers and supporting self-development (Davis, Gaudiano, McHugh & Levin, 2021). The approach adopts the view that there is a purpose underlying all displayed behaviour, and that behaviour is simply a response to a certain environment (Hayes, Luoma, Bond, Masuda, Lillis, 2006). Each skill in the DNA-V model represents a different set of purposeful behaviours, with the overall purpose of the model being to increase the psychological resilience and flexibility of young people (Hayes & Ciarrochi, 2015). The therapeutic approach most widely associated with Contextual Behavioural Science is Acceptance and Commitment Therapy (ACT). ACT is a mindfulness-based therapy that encourages individuals to define and connect with their personal values and behave in accordance with these values in order to live a fulfilling life (Gloster, Walder, Levin, Twohig & Karekla, 2020). The ACT model serves to help individuals navigate inevitable life difficulties with willingness and acceptance, whilst helping the individual to act in ways that are consistent with their values (Harris, 2006). This willingness to face life's difficulties, even though by doing so may cause varying levels of suffering, is the opposite of what ACT calls 'experiential avoidance'. Experiential avoidance can be described as avoidance and continual resistance against life's difficult experiences. Engaging in avoidant behaviours provide a period of temporary relief, which, in the short-term can be beneficial (Harris, 2006). However, continuously engaging in avoidant behaviour without ever facing difficult experiences directly is likely to cause greater suffering in the long-term (Gámez, Chmielewski, Kotov, Ruggero & Watson, 2011). Indeed, it has been demonstrated that experiential avoidance is related to anxiety, low mood, and Post-traumatic stress disorder (Akbari, Seydavi, Hosseini, Krafft, & Levin, 2022; Berman, Wheaton, McGrath & Abramowitz, 2010).

Alternatively, ACT teaches us to see these difficulties and hardships in a new light, whereby instead of trying to escape or control them, we learn to lessen their effects on our daily lives by employing mindfulness-based techniques (Harris, 2006). Mindfulness is a process through which an individual brings their attention to their present experience without judgement and with curiosity (Creswell, 2017). Thousands of mindfulness exercises exist, and through the use of multiple techniques, ACT allows the individual to look at whatever perceived difficulty they are experiencing openly and from a distance. This way it appears as less of a threat and thus, reduces the impact it has on our mental well-being. Once the perceived difficulty exerts less of an impact, individuals can then redirect the resources and mental effort expended when trying to escape it, and channel them into value-guided behaviours so that a more fulfilling and desired life can be experienced (Harris, 2006). By using this technique, ACT has been successfully employed with a wide range of populations, and has had a positive impact when implemented with those with PTSD (Woidneck, Morrison & Twohig, 2014), low mood and psychological inflexibility (Livheim et al., 2015), anxiety (Hancock et al., 2018) and OCD
(Armstrong, Morrison & Twohig, 2013).

ACT achieves its success through six key steps (Harris, 2006). The first of which is Defusion, whereby individuals learn to view the thoughts and emotions associated with perceived hardships as no more than words. Many Defusion techniques exist, one of which is to detach from thoughts by speaking them repeatedly until they lose their meaning. This creates a distance between an individual and their thoughts so that they are less harmful. The second is Acceptance, where individuals are taught to let unwanted thoughts pass through without fighting or obsessing over them. The third is Contact with the Present Moment. This involves the individual focusing their attention on their current experiences, for example, by engaging in mindfulness activities that involve the use of all five senses. The fourth is the Observing Self, where individuals are invited to consider that they are much more than their thoughts, feelings and experiences, which are constantly coming and going. They are taught to distinguish between their thoughts and the ‘observing self’ that watches them come and go, and in time, learn that they are perhaps not as frightening as previously thought. The fifth is Values, where individuals are given the chance to explore and define their personal values, and to consider if they are willing to

experience hardship in order to achieve something that is important to them. The final stage is Committed Action, where individuals set personal, value-informed goals and actively take steps to accomplish them (Harris, 2006). These six steps provide individuals with the resources to lead a meaningful life, even whilst experiencing difficulties and hardships, and thus it increases their psychological flexibility (Hubert-Williams et al., 2016).

ACT has heavily informed the development of the DNA-V model. Similarly to ACT, the end goal of the DNA-V model is to help users develop psychological flexibility. The Values component of DNA-V supports children to discover and create values by exploring what is important to them and behaving in a way that is in line with these values (Hayes & Ciarrochi, 2015), which is similar to the Values and Committed Action stages of ACT. It has been found that when people write down, clarify and redefine their personal values, it can have a positive impact on educational attainment, physical well-being and social relationships (Cohen & Sherman, 2014), and can reduce the severity of stress in response to an anxiety inducing stimulus (Creswell et al., 2005). Recent research has also demonstrated that those who reaffirmed their personal values during the outbreak of COVID-19 were less likely to experience COVID-related anxiety (Li, Xu & Zhou, 2022; Shifeng, Yiling, Fumin, Qiongying & Aibao, 2020). This evidence supports the use of the values defining element of the DNA-V model, as if children learn from an early age to identify what is important to them, and to live according to these values, they may be protected from a range of adverse outcomes, particularly when it comes to stress-inducing events.

Similar to that stages of Defusion and the Observing Self in the ACT model, the advisor component of the DNA-V relates to the words we use to communicate and our inner thoughts. We use our internal voice, or ‘Advisor’, to gain a better understanding of the world around us. However, children are taught that sometimes it is wise to step back from the Advisor when it is telling us things that are not helpful, safe or kind (Hayes & Ciarrochi, 2015). There have been a number of studies that support the use of cognitive Defusion techniques, like those taught when focusing on the advisor component of the model. For example, cognitive Defusion has been shown to reduce the impact and influence of distressing thoughts (Larssson, Hooper, Osborne, Bennett

& McHugh, 2016) as well as reduce stress and depression (Bramwell & Richardson, 2018).

The Noticer component of the DNA-V model encourages children to connect with their emotions, physical sensations and input from their environment. Similarly to the Contact with the present moment stage of ACT, where users are taught to listen carefully to all five body senses, the Noticer teaches young pupils to tune into their body, take a moment to slow down and use mindfulness to consider what is happening in the present moment (Hayes & Ciarrochi, 2015). There is a large body of support for mindfulness-based interventions, where they have been found to reduce anxiety, low mood, stress and insomnia and increase self-worth (Biegel, Brown, Shapiro & Schubert, 2009; Chi, Bo, Lui, Zhang & Chi, 2018; Reangsing, Punsuwup & Schneider, 2021). The noticer also helps children to identify and express their feelings, which may be particularly important, as it has been demonstrated that Alexithymia, the inability to recognise and label emotions (Hogeveen & Grafman, 2021), is associated with addiction and substance abuse (Orsolini, 2020) and can have an impact on our social support and relationships later in life (Rosewell, Ciarrochi, Heaven & Deane, 2014; Roswell, Ciarrochi, Deane & Heaven, 2016).

The Discoverer encourages children to explore and test their surroundings, seek out novel experiences, and to discover what their personal values are, similar to the Values stage of ACT. Those implementing the DNA-V model should support and channel children's natural curiosity rather than repress it, so that they can lead a fulfilling life (Hayes & Ciarrochi, 2015). The Discoverer section of the DNA-V model is crucial to healthy development, and supporting evidence has demonstrated that the specific skills the Discoverer encourages children to develop, such as exploration, openness and curiosity are related to greater levels of self-esteem and personal well-being (Davey, Eaker & Walters, 2003; Lydon-Staley, Zurn & Bassett, 2020).

The flexible self-view element of DNA-V allows children to observe their thoughts, actions and behaviour across different environments, and use self-perception skills to challenge negative preconceived ideas about the self and embrace positive ideas, self-confidence and self-awareness. The flexible social view element encourages children to apply their perception skills to others around them, and consider their feelings, thoughts

and actions. It also encourages the growth of interpersonal skills (Hayes & Ciarrochi, 2015). It has been found that those who have a more flexible view of themselves, and see themselves as able to grow and change, are less likely to experience emotional stress, are more likely to employ healthy ways of coping, and are better able to self-motivate and perform well academically (Burnette, Knouse, Vavra, O'Boyle & Brooks, 2020; Yeager & Dweck, 2012). It has also been found that those who show greater empathy and consideration for others, skills that are taught in the flexible social view element, report experiencing more supportive friendships and better well-being (Ciarrochi et al., 2017; Ciarrochi,
Sahdra, Hawley & Devine, 2019), and according to peer reports, those high in empathy are more likely to be kind, sociable and helpful (Sahdra, Ciarrochi, Parker, Marshall & Heaven, 2015).

The six ways to well-being

The DNA-V model is at the heart of each weekly Connect lesson, where educators encourage skill building in the context of the Discoverer, Noticer, and Advisor in different environments and combinations (Connect PSHE, 2021). The Connect lessons are organised into different themes, each of which represents a different element of the 6 ways to well-being approach, developed by Basarkod (2019) who expanded on the works of the New Economics Foundation (NEF). The NEF released a report in 2008 that assessed the evidence base surrounding 5 key health promoting behaviours; connecting with others, challenging oneself, giving to others, exercising and embracing the moment. Basarkod (2019) went on to identify a sixth behaviour, crucial to the development and maintenance of lifelong health and well-being; self-care.

According to both the New Economics Foundation (2008) and Basarkod (2019), Connecting with others is a crucial health behaviour due to the emotional, mental and physical support we receive from such social connections. Healthy social bonds can heighten our perceived worth, motivation and sense of control (Cohen, 2004; Mirowsky & Ross, 2017; Uchino, 2004) Conversely, having a small or unsupportive social circle is associated with poor mental well-being (Brugha et al., 2005) low mood, anxiety disorders and loneliness (Rowe & Khan, 1998). As Connecting with Others is so vitally important, the topic is covered extensively within Connect, making up the fourth term in the curriculum. Throughout this term, children learn to develop empathy and to consider

those around them, using these skills to resolve conflict and learn what makes a good friend (Connect PSHE, 2021). Challenging oneself through learning is also associated with greater social and cognitive function, self- worth, positive outlook and life satisfaction (Feinstein & Hammond, 2004), as well as better mental well-being (Sax, Bryant & Gilmartin, 2002) and resilience (Hammond, 2003). Challenging yourself makes up the fifth Connect term, through which children learn to overcome negative thoughts when faced with challenges, explore their personal strengths and to discover and develop new skills through various creative, sporting and constructive tasks (Connect PSHE, 2021).

The third well-being behaviour, Giving to others, not only benefits the individual displaying that behaviour, but also benefits those around them (Basarkod, 2019), and is associated with feelings of joy (Krueger, Hicks & McGue, 2001), mental and physical health (Lyubomirsky, King & Diener, 2005), and self-esteem (Brown, Hove & Nicholson, 2021). It has also been demonstrated that when people volunteer their time, they are less likely to experience depression (Kim & Morgul, 2017), and that when people undertake selfless acts weekly, they are more likely to experience greater well-being (Luybomirsky, Tkach & Sheldon, 2004). Giving to others represents the third Connect term, through which pupils learn to show appreciation of others, about charity and donation and how to help those at home, school and the local community. Similarly, physical activity is widely associated with lower levels of anxiety, mood disorders, and better overall well-being (Azar, Ball, Salmon & Cleland, 2008; Biddle & Asare, 2011). In childhood, it is associated with better cognition (Goswami, 2008) and mental illness prevention (McPhie & Rawana, 2015), and it has been found that the positive impact exercise has on mood is present after just 10 minutes of movement (Abdullah, Steuer, Marks & Page, 2008). Exercise makes up the first term of the Connect curriculum, through which children discover new ways to move their bodies, such as through yoga, and through designing their own group exercises (connect PSHE, 2021).

The fifth behaviour, Embracing the moment by mindfully grounding yourself (Basarkod, 2019), is associated with better mental well-being, self-worth and overall happiness (Brown & Ryan, 2003), as well as greater empathy (Dekeyser, Raes, Leijssen, Leysen & Dewulf, 2008) and lower levels of depression and anxiety (Brown &

Ryan, 2003). It has also been found that just a short burst of mindfulness can positively influence well-being (Keng, Smoski & Robins, 2011), and that between eight and twelve weeks of mindful activity can increase well-being in the long-term (Huppert, 2009). Embracing the moment makes up the final termly theme of Connect. Through this module, pupils engage in mindfulness exercises, learn how to embrace the moment, and how to become a 'mindfulness warrior' (Connect PSHE, 2021). The final well-being behaviour, self-care, which involves factors such as a healthy sleep schedule and nutritious diet, is associated with better well-being (Hakkarainen et al., 2004), reduced likelihood of depression and better cognition (Letenneur, Proust-Lima, Le Gouge, Dartigues & Barberger-Gateau, 2007). Self-care is the second termly theme within Connect, through which children learn about food groups and balancing their diet, as well as the importance of hygiene, moving your body and sleep (Connect PSHE, 2021)

Connect us in England vs Wales

Although Connect is available throughout all English-speaking countries, within the UK it is most widely used in England. This is likely due to the fact that Connect was designed specifically to meet the needs of the English Relationship and Sex Education (RSE) curriculum. Although PSHE education is not mandatory in England, teaching about relationships and sexual education is. It is up to individual institutions to decide how to deliver this education, so long as it meets the targets of the English curriculum. Many institutions therefore choose to invest in pre-designed health and well-being programs, such as Connect, a decision that is made easier when it is explicitly stated how such a program meets the needs of the national curriculum. The Connect website includes a link to a document that provides a breakdown of how the Connect curriculum covers all of the statutory RSE targets. The document contains a table that includes the important content to be covered under the English RSE curriculum. The lesson plan within each connect term that best covers this content is then stated alongside it, so that teachers in England are able to see exactly how each connect lesson they deliver meets the needs of the RSE curriculum.

Interest in the Connect curriculum is growing amongst educators and institutions in Wales, however, as stated previously, England and Wales have vastly different

education systems and different approaches when it comes to health and well-being. Similarly, institutions in Wales are free to choose how they deliver health and well-being content to their pupils, but they have much more explicit guidelines about what should be covered under PSHE education, which is mandatory in Wales. The new curriculum for Wales has introduced health and well-being education as a priority subject, with its own dedicated Area of Learning and Experience (AoLE). Within this, statements of what matter provide detail about targets and expectations, which are further elaborated on within the descriptions of learning. As health and well-being is such a crucial part of the Welsh curriculum, covering topics such as physical health, mental health and emotional well-being, decision making, social influences and relationships, it already has a number of surface level similarities with the content taught through the Connect program. However, unlike in England, there is no information readily available about how the content of Connect specifically meets the needs of the health and well-being curriculum in Wales. If teachers in Wales were provided with information clearly detailing how the Connect program maps onto the Welsh curriculum and covers the content expressed in the health and well-being AoLE, then educators may be more likely to invest in the program, meaning both pupils and staff could benefit from a curriculum rooted in psychological and educational science, and supported by a strong empirical evidence base.

This chapter will therefore investigate the question; ‘how well does the Connect curriculum align with the health and well-being AoLE; Welsh curriculum?’ It was decided that in order to answer this question comprehensively, the investigation would be broken down into two sections. Study 1 details how the researcher created a mapping document to assess the extent to which the Connect program covers the targets set out in the Welsh Curriculum’s health and well-being AoLE. Study 2 details how three primary school teachers were recruited to review this mapping document, and state the extent to which they agreed with the researcher’s decisions when mapping Connect to the Welsh curriculum.

## Study 1
## Method

### Mapping procedure

Firstly, the researcher used the Connect website (Connect PSHE (connect-pshe.org)) to familiarize themselves with all Connect resources for years reception to 6. These resources included lesson plans, PowerPoints, audio files, scripts and worksheets, plus lesson plans from the additional lessons section found in the Connect toolbox. Following this, the researcher decided to use the EYFS Early Learning Goals (reception) and PSHE association Curriculum Objectives (years 1-6) contained within each Connect lesson plan, and the lesson plans for the additional lessons, to map Connect onto the Welsh curriculum. The new curriculum for Wales comprises 6 areas of learning and experience (AoLE); Expressive Arts, Health and Well-being, Humanities, Languages, Literacy and Communication, Mathematics and Numeracy, and Science and Technology. As connect is a health and well-being curriculum, the researcher was interested in mapping the intervention onto the health and well-being AoLE.

The health and well-being AoLE is broken down into 5 ‘what matters’ statements, with these statements further being broken down into descriptions of learning. These descriptions of learning ‘provide guidance on how learners should progress within each statement of what matters as they journey through the continuum of learning. These provide reference points for the pace of that progression’ (Welsh Government, 2020). Although the ‘what matters’ statements remain the same across all age groups, the descriptions of learning are different for each progression step. Progression steps serve as a guide for how quickly learners should be accessing new knowledge and acquiring new skills with progression step 1 guiding learners aged 3-5 (Nursery and Reception), progression step 2 guiding learners aged 5-8 (years 1-3), and progression step 3 guiding learners aged 8-11 (years 4-6). Therefore, it was ultimately decided to map the Connect Early Learning Goals and Curriculum Objectives onto the descriptions of learning within the ‘What Matters’ statements, under the health and well-being AoLE, organised around each progression step. As Connect is designed for pupils aged 4-11 (reception to year 6), this meant that the reception Early learning goals were mapped onto the descriptions of learning for

progression step 1, the Connect Curriculum Objectives for years 1-3 were mapped onto the descriptions of learning for progression step 2, and the Connect Curriculum Objectives for years 4-6 were mapped onto the descriptions of learning for progression step 3.

An excel document was then created to act as a template for the mapping process (see Figures 1, 2 and 3). The health and well-being AoLE 'What Matters' statements and the descriptions of learning for each progression step were added to the first 2 columns of the spreadsheet. The Connect Early Learning Goals and Curriculum objectives for each year group were then mapped onto which ever description of learning the researcher felt was best encompassed by the aim of the goal or objective. This was achieved by pasting the goal or objective into an adjacent cell in the next column along to the corresponding description of learning. Using a traffic light system, the researcher then coded each goal or objective to demonstrate how well they were able to be mapped onto a specific area of the health and well-being AoLE, i.e. how well the goal or objective encompassed the aim of the Description of Learning. Goals or objectives were coded green if they could be easily mapped onto a specific area of the health and well-being AoLE, yellow if they could be partially or somewhat mapped onto a specific area of the health and well-being AoLE, and red if they were difficult to map onto a specific area of the health and well-being AoLE. Some of the learning objectives contained within the Connect lesson plans remained the same across different year groups, and so were mapped again onto the same descriptions of learning and given the same colour code. This process was completed for all Early Learning Goals and Curriculum Objectives for each year group and each progression step, with the templates for progression steps 1, 2 and 3 being located in different worksheets in the Excel workbook (see appendix 1).

**Figure 1**

*Template for mapping Connect Early Learning Goals onto the Descriptions of Learning defined by the What Matters statements in the Health and Well-being AoLE for progression step 1*

| Health and Wellbeing Progression Step 1 (Welsh Curriculum) | | Reception | Colour Key: |
|---|---|---|---|
| What Matters Statement | Descriptions of Learning | EYFS Early Learning Goals | Early Learning Goal is able to be easily mapped onto this Description of Learning |
| Devloping physical health and wellbeing has life long benefits | I have the confidence and motivation to move in different ways and I am beginning to develop control of gross motor movements and fine motor movements in different environments, moving safely in response to instructions. | EA&D: "Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design,texture, form and function". | Early Learning Goal is able to be somewhat/partially mapped onto this Description of Learning |
| | | PD: "Demonstrate strength, balance and coordination when playing" | Early Learning Goal is difficult to map onto this Description of Learning |
| | | PD: "Move energetically, such as running, jumping, dancing, hopping, skipping and climbing." | |
| | | PD: "Begin to show accuracy and care when drawing". | |
| | | PD: "Negotiate space and obstacles safely, with consideration for themselves and others." | |

**Figure 2**

*Template for mapping Connect Curriculum Objectives onto the Descriptions of Learning defined by the What Matters statements in the Health and Well-being AoLE for progression step 2*

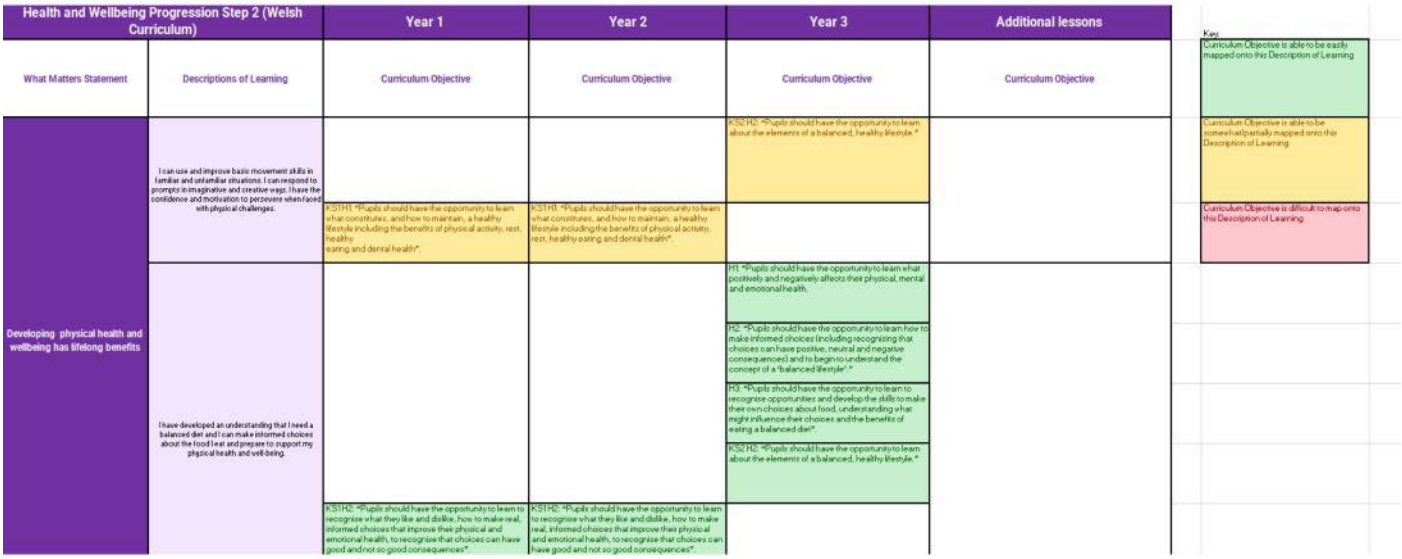
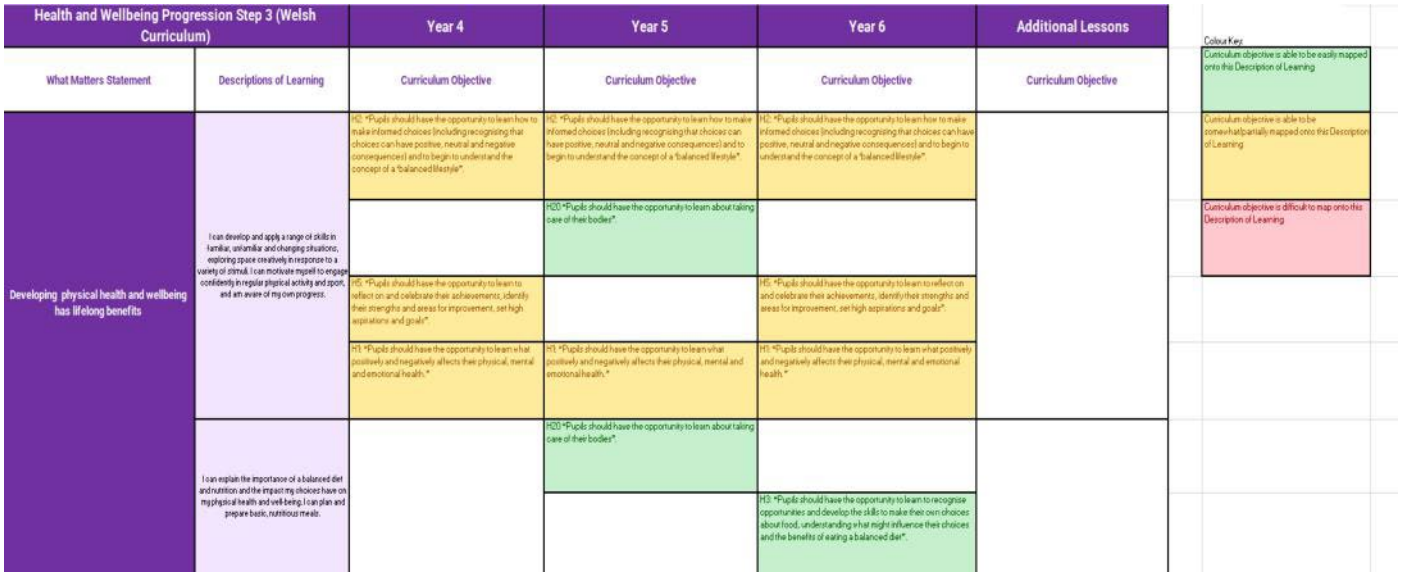


**Figure 3**

*Template for mapping Connect Curriculum Objectives onto the Descriptions of Learning defined by the What Matters statements in the Health and Well-being AoLE for progression step 3*




This process was then repeated to map the Connect Early Learning Goals and Curriculum Objectives for each year group, plus the additional lessons, onto the Religious and Sex Education (RSE) curriculum for Wales using a similar template (see Figures 4 and 5). The RSE curriculum is made up of 3 strands; Relationships and identity, Sexual health and well-being, Empowerment, safety and respect. Each strand is then comprised of a number of statements that guide learners progress, and encompass skills that pupils should develop as they progress through each strand. These statements are organised around 3 phases, with phase 1 being aimed at pupils aged 3-7, stage 2 being aimed at pupils aged 7-11, and phase 3 being aimed at pupils 11+. Therefore, the Connect Early Learning Goals for reception and the Curriculum Objectives for years 1 and 2 were mapped onto the Phase 1 RSE strand statements, and the Connect Curriculum Objectives for years 3, 4, 5 and 6 were mapped onto Phase 2 RSE strand statements. Goals and Objectives were mapped and colour coded in the same manner as described above. The templates for each phase relevant to primary education (phases 1 and

2) were located in different worksheets in the Microsoft Excel workbook (see appendix 2).

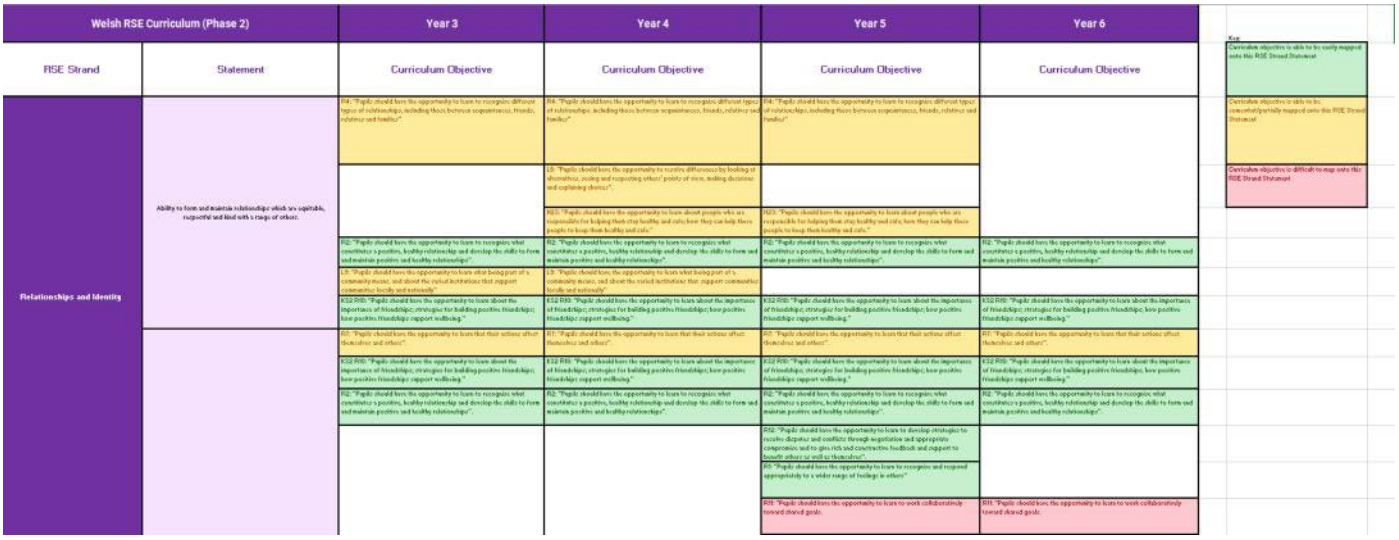
**Figure 4**

*Template for mapping Early Learning Goals and Connect Curriculum Objectives onto the RSE statements defined by the RSE strands in the Welsh RSE curriculum for phase 1.*

| Welsh RSE Curriculum (Phase 1) | | Reception | Year 1 | Year 2 |
|---|---|---|---|---|
| RSE Strand | Statement | EYFS Early Learning Goals | Curriculum Objective | Curriculum Objective |
| Relationships and Identity | | | | |

**Figure 5**

*Template for mapping Connect Curriculum Objectives onto the RSE statements defined by the RSE strands in the Welsh RSE curriculum for phase 2*




## Data analysis

All data was analysed using the Microsoft Excel workbook. Once all Early Learning Goals and Connect Curriculum Objectives had been mapped and colour coded, percentages were calculated for all Goals and Objectives colour coded green, yellow, and red using the Quick Analysis tool in Microsoft Excel.

## Results

Data analysis revealed that the Connect Early learning goals and Curriculum Objectives for years reception through to 6 were able to be successfully mapped onto 95.7% of the health and well-being AoLE descriptions of Learning. This means that almost 96% of the health and well-being targets set by the Welsh curriculum are covered by content contained within the Connect lesson plans. 4.3% of the descriptions of learning remained unmet by content covered in the Connect lessons according to the researcher. The descriptions of learning considered unmet by Connect according to the researcher were as follows; ‘I am beginning to have an awareness of how feelings are communicated through actions’, ‘I can make decisions based on what I like and dislike’, and ‘I am beginning to recognise that I have the right to be treated fairly and respectfully’. All three of these descriptions of learning occurred at the reception level.

When broken down by colour codes, the results were more varied. For progression step 1, the researcher coded 77.5% of all Early Learning Goals green, meaning that they were able to be easily mapped onto a specific area of the health and well-being AoLE. 20% of all Early Learning Goals were coded yellow, meaning that they were able to be partially or somewhat mapped onto a specific area of the health and well-being AoLE. 2.5% of all Early Learning Goals were coded red, meaning that they were difficult to map onto a specific area of the health and wellbeing AoLE. For progression step 2, the percentage of Connect Curriculum Objectives colour coded green was 49%, the percentage of Curriculum Objectives colour coded yellow was 40.4%, and the percentage of Curriculum Objectives colour coded red was 10.6%. Finally, for progression step 3, the total number of Curriculum Objectives coded green was 63.3%, the number of Curriculum Objectives colour coded yellow was 33.8%, and the number of Curriculum Objectives colour coded red was 2.9%. This meant that when combined, the total percentage of green codes across all 3 progression steps was 59.1%, the total percentage of yellow codes was 35%, and the total percentage of red codes was 5.9%.

It is important to note that when the total percentage of red codes across all three progression steps was broken down further, it was found that 57.1% of the time this was due to the Connect goals or objectives not covering the targets set by the Welsh curriculum comprehensively enough in the eyes of the researcher, and so they were considered difficult to map. However, 42.8% of the time this was due to the Connect Goals or Objectives covering additional content that was not considered a health and well-being target by the Welsh curriculum AoLE, and so was considered difficult to map. It was also found that when examining the number of red coded goals or objectives across all three progression steps, the highest percentage of red codes (15%) occurred when goals or objectives were mapped onto descriptions of learning defined under the ‘What Matters’ statement of ‘How we engage with social influences shapes who we are and affects our health and well-being’.

For the mapping of Connect to the Welsh RSE curriculum, it was found that the Connect goals and objectives were able to be successfully mapped onto 96.6% of the Welsh RSE curriculum statements. This means that almost 97% of the RSE targets for Wales are covered by content contained within the Connect lesson plans. 3.4% of the RSE targets remained unmet by content covered in the Connect lessons according to the researcher. The RSE statements considered unmet by Connect according to the

researcher were as follows; ‘The use of accurate terminology for all body parts’ and ‘Recognising the process of pregnancy and birth’. The RSE statements occurred in phase 1 and phase 2 of the RSE curriculum respectively.

When broken down by phase, it was found that for phase 1, the researcher coded 60.8% of Connect Early Learning Goals and Curriculum Objectives green, meaning they could be easily mapped onto a specific area of the Welsh RSE curriculum. 31.5% of Early Learning Goals and Curriculum Objectives were colour coded yellow, meaning they were able to be somewhat or partially mapped onto a specific area of the Welsh RSE strand. 7.7% of Early Learning Goals and Curriculum Objectives were colour coded red, meaning they were difficult to map onto a specific area of the Welsh RSE strand. For phase 2, 54.2% of Curriculum Objectives were colour coded green, 41.5% were colour coded yellow, and 4.3% were colour coded red. For the additional lessons, it was found that 42.9% of Curriculum Objectives were colour coded green, 38.1% were colour coded yellow, and 19% were colour coded red. This meant that when combined, the total percentage of green codes across the 2 phases, and the additional lessons, was 55.9%, the total percentage of yellow codes was 38.1%, and the total percentage of red codes was 6%.

It is again important to note that when the total percentage of red codes across both RSE phases was broken down further, it was found that 48.5% of the time this was due to the Connect goals or objectives not covering the targets set by the Welsh RSE curriculum comprehensively enough in the eyes of the researcher, and so they were considered difficult to map. However, 51.5% of the time this was due to the Connect Goals or Objectives covering additional content that was not considered a target by the RSE curriculum for Wales, and so was considered difficult to map. It was also found that when examining the number of red coded goals or objectives across both RSE phases, the highest percentage of red codes (25%) occurred when goals or objectives were mapped onto the RSE strand labelled ‘Sexual health and well-being’.

## Study 2
## Methods

Participants

Three educators were recruited as participants to act as reviewers for this mapping process via opportunity sampling. All reviewers were primary school teachers who taught in schools across Northwest Wales. Additionally, participant 2 was the health and well-being lead for her school and reviewers 1 and 3 were the ALN co-ordinators for their schools (see table 1). The third participant was originally part of the thematic content analysis study (chapter 3) and was recruited via the interviews that took place as part of the research. She therefore had previous experience with the Connect program, as she had delivered it to her year 2 class for 6 weeks prior to her recruitment as a reviewer.

**Table 1**

*information about participants*

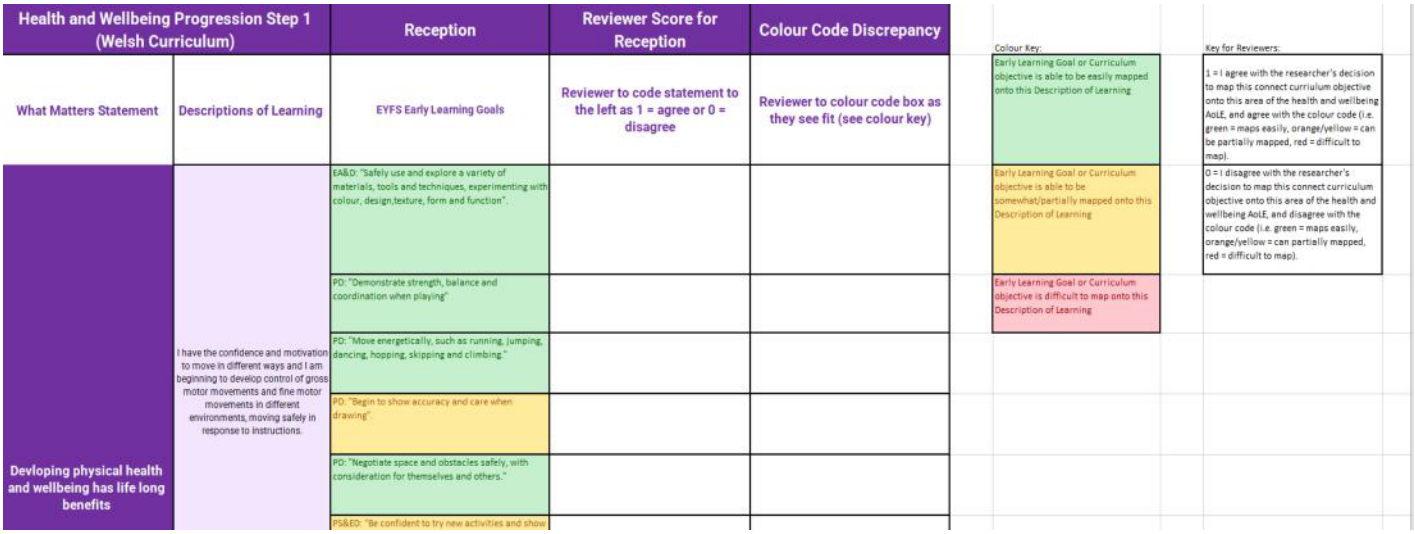
| Participant ID | Gender | Role in school |
|---|---|---|
| Reviewer 1 | Female | Primary school teacher and ALN co-ordinator |
| Reviewer 2 | Female | Primary school teacher and health and well-being lead |
| Reviewer 3 | Female | Primary school teacher and ALN co-ordinator |

Procedure

The 3 reviewers were asked to indicate the extent to which they agreed/disagreed with the researcher's decision to map and colour code the various Goals and Objectives to the health and well-being AoLE or Welsh Religious Sex Education (RSE) curriculum. They were given written instructions (see appendix 3) that detailed the researcher's mapping and colour coding process so far, along with the mapping template the researcher had created in Microsoft Excel. The instructions explained that 2 additional columns had been created adjacent to the mapped and colour coded Goals and Objectives for each year group (see Figure 6). In the first of these columns, labelled 'reviewer score', the reviewers were asked to add a 1 or a 0 next to each mapped and colour coded Goal or Objective (see Figure 7). A 1 would indicate that the reviewer agreed with the researcher's decision to map that Goal or Objective onto a specific area of the health and well-being AoLE or RSE curriculum. A 0 would indicate that the reviewer disagreed with the researcher's decision to map that Goal or Objective onto a specific area of the health and wellbeing AoLE or RSE curriculum. Reviewers were asked to enter a score in each row of the column where there was a mapped Objective or Goal in the adjacent column to the left. For rows where there was no mapped Objective or Goal in the adjacent column, reviewers were asked to leave the cell blank.

**Figure 6**

*Template with additional columns added for reviewers; Reviewer Score and Colour Code Discrepancy*



| Health and Wellbeing Progression Step 1 (Welsh Curriculum) | | Reception | Reviewer Score for Reception | Colour Code Discrepancy |
|---|---|---|---|---|
| What Matters Statement | Descriptions of Learning | EYFS Early Learning Goals | Reviewer to code statement to the left as 1 = agree or 0 = disagree | Reviewer to colour code box as they see fit (see colour key) |
| Devloping physical health and wellbeing has life long benefits | I have the confidence and motivation to move in different ways and I am beginning to develop control of gross motor movements and fine motor movements in different environments, moving safely in response to instructions. | EA&D: "Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design,texture, form and function". | | |
| | | PD: "Demonstrate strength, balance and coordination when playing" | | |
| | | PD: "Move energetically, such as running, jumping, dancing, hopping, skipping and climbing." | | |
| | | PD: "Begin to show accuracy and care when drawing". | | |
| | | PD: "Negotiate space and obstacles safely, with consideration for themselves and others." | | |
| | | PS&EO: "Be confident to try new activities and show | | |

Colour Key:
- Early Learning Goal or Curriculum objective is able to be easily mapped onto this Description of Learning
- Early Learning Goal or Curriculum objective is able to be somewhat/partially mapped onto this Description of Learning
- Early Learning Goal or Curriculum objective is difficult to map onto this Description of Learning

Key for Reviewers:
- 1 = I agree with the researcher's decision to map this connect curriculum objective onto this area of the health and wellbeing AoLE, and agree with the colour code (i.e. green = maps easily, orange/yellow = can be partially mapped, red = difficult to map).
- 0 = I disagree with the researcher's decision to map this connect curriculum objective onto this area of the health and wellbeing AoLE, and disagree with the colour code (i.e. green = maps easily, orange/yellow = can partially mapped, red = difficult to map).

**Figure 7**

*Template demonstrating the reviewer scoring process*

| Health and Wellbeing Progression Step 3 (Welsh Curriculum) | | Year 4 | Reviewer score for year 4 |
|---|---|---|---|
| What Matters Statement | Description of Learning | Curriculum Objective | Reviewer to code statement to the left as 1 = agree or 0 = disagree |
| Developing physical health and wellbeing has lifelong benefits | I can develop and apply a range of skills in familiar, unfamiliar and changing situations, exploring space creatively in response to a variety of stimuli. I can motivate myself to engage confidently in regular physical activity and sport, and am aware of my own progress. | H2: "Pupils should have the opportunity to learn how to make informed choices (including recognising that choices can have positive, neutral and negative consequences) and to begin to understand the concept of a 'balanced lifestyle". | 1 |
| | | | |
| | | H5: "Pupils should have the opportunity to learn to reflect on and celebrate their achievements, identify their strengths and areas for improvement, set high aspirations and goals". | 1 |
| | | H1: "Pupils should have the opportunity to learn what positively and negatively affects their physical, mental and emotional health." | 1 |

If reviewers added a 0 in the 'Reviewer Score' column, they were asked to think about the extent to which they agreed/disagreed with the researcher's decision to colour code the adjacent Goal or Objective either green, yellow or red, by engaging with the second column,

labelled ‘Colour Code Discrepancy’. If the reviewer disagreed with the researchers colour coding decision, they were asked to colour code the adjacent cell in the ‘Reviewer Score’ column green if they felt that a Goal or Objective could be easily mapped to a specific area of the health and well-being AoLE or RSE curriculum, yellow if they felt it could be partially or somewhat mapped, or red if they felt it was difficult to map (See Figure 8). They were also asked to include a comment in the same colour coded cell explaining why they felt the Goal or Objective should instead be colour coded that way. Reviewer 1 was asked to review the mapping of the Connect Goals and Objectives onto the Welsh RSE curriculum for phases 1 and 2, plus any additional lessons (see appendix 4). Reviewer 2 was asked to review the mapping of the Connect Goals and Objectives onto the health and well-being AoLE for progression steps 1 and 2 (see appendix 5). Reviewer 3 was asked to review the mapping of the Connect Goals and Objectives onto the health and well-being AoLE for progression step 3 (see appendix 6).

**Figure 8**

*Template demonstrating the reviewer colour coding process*


Data collection

All reviewers completed the review of the mapping work in Microsoft Excel on the template created by the researcher. All completed review data sheets were sent back to the researcher via email within a month of the researcher sending out the original mapping template and reviewer instructions.

Data analysis

All data was analysed in Excel, within the same datasheets completed by the reviewers. Using the Quick Analysis tool, totals and percentages were calculated for the number of times each reviewer agreed or disagreed with the researcher. Totals and percentages were then calculated for the number of green, yellow, and red cells coded by each reviewer if they disagreed with the researcher's initial mapping decision.

## Results

Data analysis revealed that the first reviewer agreed with 87.2% of the researcher's decisions to map Connect Goals and Objectives onto a specific area of the Welsh RSE curriculum, and disagreed with 12.8% of the researcher's decisions. When the reviewer disagreed with the researcher's colour coding decision, it was found that 49.3% of the time this was due to the reviewer believing the Goal or Objective should instead be colour coded green, meaning that they felt it could have been mapped easily, 38% of the time this was due to the reviewer believing the Goal or Objective should instead be colour coded yellow, meaning it could have been partially or somewhat mapped, and 12.7% of the time this was due to the reviewer believing the Goal or Objective should instead be colour coded red, meaning it could be difficult to map.

The second researcher agreed with 79.6% of the researcher's decisions to map Connect Goals and Objectives onto a specific area of the health and well-being AoLE, and disagreed with 20.4% of the researcher's decisions. When the reviewer disagreed with the researcher's colour coding decision, it was found that 58.5% of the time this was due to the reviewer believing the Goal or Objective should instead be colour coded green, 29.3% of the time this was due to the reviewer believing the Goal or Objective should instead be colour coded yellow, and 12.2% of the time this was due to the reviewer believing the Goal or Objective should instead be colour coded red.

The third researcher agreed with 83.8% of the researcher's decisions to map Connect Goals and Objectives onto a specific area of the health and well-being AoLE, and disagreed with 16.2% of the researcher's decisions. When the reviewer disagreed with the researcher's colour coding decision, it was found that 61.8% of the time this was

due to the reviewer believing the Goal or Objective should instead be colour coded green, 35.3% of the time this was due to the reviewer believing the Goal or Objective should instead be colour coded yellow, and 2.9% of the time this was due to the reviewer believing the Goal or Objective should instead be colour coded red.

This meant that across all 3 reviewers, there was a total agreement of 84.9% and a total disagreement of 15.1% when it came to the researcher's decisions to map Connect Early Learning Goals and Curriculum Objectives onto the Welsh RSE curriculum and the Welsh curriculum's health and well-being Area of Learning and Experience (see appendix 7). Across the 2 reviewers that examined the mapping of the Connect Early Learning Goals and Curriculum Objectives onto the health and well-being AoLE, there was a total agreement of 82.1% and a total disagreement of 17.9%. Across both reviewers, it was also found that when the reviewers disagreed with the researcher's colour coding decision, 59.6% of the time this was due to the reviewer believing the Goal or Objective should instead be colour coded green, 34.7% of the time this was due to the reviewer believing the Goal or Objective should instead be colour coded yellow, and 6.7% of the time this was due to the reviewer believing the Goal or Objective should instead be colour coded red.

## Discussion

The aim of this chapter was to investigate the extent to which the Connect curriculum is able to be mapped onto the Welsh curriculum's health and well-being Area of Learning and Experience. In study 1, the researcher achieved this by creating a mapping document, in which the Connect Early Learning Goals and Curriculum Objectives were mapped onto an appropriate description of learning, defined by the 'what matters' statements, and colour coded to represent how easily goals or objectives were able to be mapped. Data analysis revealed that 95.7% of health and well-being AoLE targets were covered by Connect content, with only 4.3% remaining uncovered. Across all 3 progression steps, 59.1% of goals and objectives were colour coded green, 35% were colour coded yellow, and 5.9% were colour coded red. The researcher repeated this mapping process to assess the extent to which the Connect Early Learning Goals and Curriculum Objectives were able to be mapped onto the Religious and Sexual Education curriculum for Wales. Data analysis revealed that 96.6% of RSE targets were covered by

Connect content, with only 3.4% remaining uncovered. Across both phases, 55.9% of goals or objectives were colour coded green, 38.1% were colour coded yellow, and 6% were colour coded red.

Taken together, the data demonstrates that the aims of Connect as a health and well-being curriculum fit well with the expectations and targets of the health and well-being AoLE of the Welsh curriculum. Almost 56% of the goals and objectives stated in Connect weekly lesson plans were considered by the research to map well onto an area of the health and well-being AoLE, meaning that aims of the Connect program are in line with those set out in Wales's health and well-being focused curriculum, and that the program as a whole embodies the values upheld by the nation. Although this is a positive outcome, the number of goals or objectives considered easy to map onto the Welsh curriculum was not as high as the researcher expected. This may have been due to several reasons. Firstly, the lower number of green goals or objectives and higher number of yellow goals or objectives than expected may have been due to the wording of the Connect targets being very specific. Contrastingly, the wording of the Welsh curriculum's descriptors of learning are kept deliberately broad, and to a certain extent, open to interpretation, as it is left to educators and institutions to make decisions about the specific content they deliver. This led to the researcher coding Connect goals or objectives yellow instead of green if the specified content contained within them was too discreet to encompass the broad targets set out in the descriptions of learning in their entirety. Therefore, for the majority of goals or objectives coded yellow, it does not mean they fail to sufficiently meet the needs of a specific Welsh curriculum target, simply that they only meet one part of it.

Secondly, it may be due to the fact that the Welsh curriculum is organised around progression steps, whereas Connect content is organised around the different year groups. It is made clear within the guidance surrounding the new curriculum for Wales that the targets detailed in the descriptions of learning are designed to be met over a wider timeframe than just a single year, as they recognise that learning occurs at a different pace for each student, and so are designed to take this into consideration and are related to age group only loosely. They are also not

designed to be met by single lessons, tasks or activities, but instead represent achievements resulting from continuous learning and exploration (Welsh Government, 2020). Therefore, this may account for why there were a greater number of yellow codes and fewer number of green codes than expected, as when the researcher attempted to map specific and narrow goals and learning objectives organised by year group, often achieved through single lessons or tasks, onto a curriculum organised by progression step, then the content expressed through Connect goals and objectives may have only partially encompassed the description of learning it was mapped onto. If Connect and the Welsh curriculum had similar expectations for student's pace of learning, for example if Connect was organised by progression step, or the Welsh curriculum was organised by year group, then there may have been a higher percentage of green codes present, meaning Connect could be mapped more easily onto the health and well-being AoLE.

Thirdly, the high number of yellow codes may be due to the researcher's decision to map the Connect goals and objectives onto more than one description of learning where they saw fit. For example, if a goal or objective encompassed one of the descriptions of learning well, and therefore could be really easily mapped, it was coded green. However, if the same goal or objective also partially encompassed the goals of a different description of learning, it was mapped again and coded yellow. This ultimately led to a greater number of yellow codes than if the researcher chose to map each goal or objective onto only one description of learning; the one best encompassed by the Connect goal or objective.

Only 4.3% of Connect goals or objectives were considered difficult to map onto the Welsh curriculum, which is an incredibly positive finding. It is even more positive when we consider that 42.8% of the time that goals or objectives were coded red, this was due to the researcher believing they were difficult to map onto the Welsh curriculum because they contained additional content or covered additional topics that were not considered within the health and well-being AoLE. It may be therefore, that as Connect was able to cover 95.7% of the health and wellbeing AoLE, the 42.8% of red codes were providing educational content that goes above and beyond the requirements of the Welsh curriculum. The highest overall number of red codes was found when goals or objectives were mapped onto the section containing the 'what matters' statement 'How

we engage with social influences shapes who we are and affects our health and well-being'. Specifically, the researcher felt that the descriptions of learning such as 'I have developed an understanding that my values, attitudes and identity are shaped by different groups and influences', and 'I can change how I interact and behave in different situations with support' were not comprehensively covered by the goals or objectives of Connect.

Study 1 also investigated the extent to which the Connect curriculum is able to be mapped onto the Welsh RSE curriculum. It was found that 96.6% of the Welsh RSE targets are covered by the Connect curriculum, with just 3.4% remaining uncovered. Similarly to the AoLE mapping, the number of green coded Connect goals or objectives across both RSE phases was lower than expected (55.9%), whilst the number of yellow codes was higher than expected (38.1%). This may be due to the same factors discussed in relation to the mapping of Connect to the health and well-being AoLE. The RSE strand statements are similarly broad and may encompass a multitude of different skills and knowledge. Therefore when the discreet Connect goals and objectives were mapped onto the wide-ranging strand statements, they may have only partially covered the target expressed within. Similarly to the health and well-being AoLE, the RSE curriculum is not organised around year groups but instead two distinct phases. This may again account for the lower number of green and higher number of yellow codes. Finally, the researcher again decided to map goals or objectives onto more than one strand statement where they saw fit, again likely leading to a greater number of yellow codes. Only 6% of goals or objectives were colour coded red, with over half of these (51.5%) being considered by the researcher to be difficult to map due to them covering additional content than that required by the RSE curriculum. The greatest number of red codes across both phases (25%) occurred when goals or objectives were mapped onto the RSE strand labelled 'sexual health and well-being'. Specifically, the researcher felt that the strand statements of 'The knowledge and skills needed to manage personal self-care and hygiene, including the importance of menstrual well-being' and 'Awareness of how people can feel attracted to others as they mature and how this can lead to emotional and physical responses' were not comprehensively covered by the goals or objectives of Connect.

Study 2 sought to consolidate the mapping decisions made by the researcher, by recruiting 3 educators to review the mapping process to assess its reliability. This was achieved through the reviewers stating the extent to which they agreed with the researcher's decision to map Connect goals or objectives onto the descriptions of learning, and the extent to which they agreed with the researchers colour coding decisions. It was found that across the 3 reviewers, there was a total agreement of 84.9%, and a total disagreement of 15.1% when it came to the mapping of Connect goals or objectives onto the health and well-being AoLE and RSE curriculum. Across the reviewers who examined the mapping of Connect to the health and well-being AoLE, it was found that when they disagreed with the researcher's colour coding decisions, 58.6% of the time they believed that a code or goal should instead be coded green, 34.7% of the time they believed it should instead be coded yellow and 6% of the time they believed it should instead be coded red. This is a very positive finding, as it demonstrates that when the reviewer's disagreed with the colour coded goal or objective, overwhelmingly it was due to them believing that it was able to easily be mapped onto an area of the health and well-being AoLE, rather than being somewhat/partially able to, or difficult to map as the researcher originally indicated.

For the reviewer who examined the mapping of Connect to the Welsh RSE curriculum, 49.3% of the time when they disagreed with the researcher's colour coding decision, it was because they believed that a goal or objective should instead be coded green, 38% of the time it was because they believed that a goal or objective should instead be coded yellow, and 12.7% of the time it was because they believe that a goal or objective should instead be coded red. Again, this is a very positive result as it demonstrates that the majority of colour code discrepancies were due to the reviewer believing mapped goals or objectives were easier to map onto the Welsh RSE curriculum than the researcher indicated. These results may therefore indicate that the reviewer was too stringent in their initial mapping of Connect to both the Welsh RSE and health and well-being AoLE. All three reviewers felt that a higher percentage of mapped Connect goals and objectives should be considered easy to map onto the respective curriculums, and therefore should be colour coded green. It is important to note that all 3 reviewers were experienced teachers, with 2 of the teachers also being ALNco's for their respective institutions and 1

being the health and well-being lead for their school, that also had experience of teaching Connect to their primary cohort. The researcher had no prior experience of the Connect program or with delivering health and well-being interventions to primary aged pupils, so the input of the reviewers is essential to the consolidation of this mapping process, due to their knowledge of what constitutes a good health and well-being program that meets the needs of the national curriculum. The fact that with this knowledge, all 3 believed that a higher number of green codes should be present, indicates that Connect may map onto the Health and well-being AoLE and Welsh RSE curriculum more comprehensively than originally thought by the researcher.

The results of this mapping review are positive in nature and demonstrate that Connect is able to cover 95.7% of the targets set out by the health and well-being AoLE, and 96.6% of the targets set out by the Welsh RSE curriculum. This means that Connect may be a well-suited vehicle through which educators in Wales can deliver health and well-being content to their pupils. The introduction of the health and well-being AoLE has brought about new targets to achieve, set out in the descriptions of learning, however, educators may feel unsure about how to approach the achievement of such targets, especially if they lack comprehensive knowledge about child health and well-being. For example, in England it has been demonstrated that as high as 30% of teachers feel unprepared to support pupils in their class who struggle with their mental well-being (Department of Education, 2017). The report published by the Department of Education did not include statistics about educators in Wales, however, it has been reported that in the face of the new curriculum for Wales, teachers are concerned about delivering effective well-being education when they have gaps in their knowledge concerning mental health (Long, Hawkins, Murphy & Moore, 2023). Additional qualitative investigations have highlighted how although educators are excited about the curriculum reform, many are also anxious about how the expectations placed on them will change (Power, Newton & Taylor, 2020), and are worried about the lack of guidance available to them that details how to achieve the targets set out in each AoLE (Hughes & Lewis, 2020). Therefore, the findings of this chapter may likely be of great significance to educators in Wales. The mapping document clearly demonstrates how each connect lesson plan meets a target set out in the health and well-being curriculum, and so therefore may relieve any anxiety about not meeting the health and well-being targets experienced by teachers who subscribe to the program. As the fit of Connect to both the Welsh curriculum’s health and well-being AoLE

and the RSE curriculum was assessed for lesson plans across each year group, educators are able to see for themselves how Connect is able to map onto AoLE and RSE targets across the whole school and each phase of learning. The fact that Connect is able to be mapped onto both curricula to such a high degree across all year groups establishes the program as one that is able to be adopted holistically throughout an institution on a whole-school basis. In their 2021 report, the Welsh Government recommended that health and well-being programs be enrolled across the entire school in order to reap maximum benefits. This involves interventions being adopted across all year groups, being delivered to all pupils regardless of level of need, and being thoroughly integrated into school life, culture and language. This mapping review therefore highlights how Connect is able to meet the requirements of the Welsh curriculum for years reception to six, and therefore is a promising intervention that has the potential to meet the recommendations of the Welsh government and be enrolled on a whole-school basis.

Strengths, limitations and directions for future research

Chapter 2 of this master's dissertation has several strengths. First, this is the only attempt to objectively map a health and well-being intervention onto a national curriculum, to assess the extent to which it meets the health and well-being needs of that country. Second, the recruitment of educators as mapping reviewers not only boosted the reliability of this mapping process, but actively accessed the views, opinions and knowledge of 3 primary school teachers. The health and well-being of young people is paramount (Roffey, Williams, Greig & Mackay, 2016), however, educators can find it difficult to select a health and well-being program that meets both the needs of their students and the national curriculum, whilst being grounded in scientific evidence. This is largely due to the conflicting information available resulting from attempts to evaluate current health and well-being programs (Mackenzie & Williams, 2018) and the lack of time and resources teachers have when it comes to exploring intervention options (Bas & Kivilcim, 2017). The strengths of this mapping investigation overcome such issues by providing educators with a document that explicitly details how the Connect program meets the needs of the health and well-being AoLE, and by involving educators, a group of individuals directly concerned with providing health and well-being education to their pupils, in the research process by asking them to review the researchers mapping decisions. Furthermore, this mapping investigation

represents the foundations for which future research can build upon. The research has highlighted the areas of the health and well-being AoLE that require additional coverage, so now attempts can begin to adapt Connect for use in Wales, so it better meets all the targets set out in each description of learning stated in the health and well-being AoLE. Finally, the mapping template created can be distributed and used to map current and future health and well-being programs to the Welsh curriculum's health and well-being AoLE to assess their fit, and ultimately ensure that health and well-being education in Wales is the best it possibly can be for young learners.

However, this investigation also carries several limitations. As mentioned previously, the researcher decided to map Connect goals or objectives onto more than one description of learning where they saw fit. This may have skewed the results, as it is likely that this decision resulted in a higher number of yellow codes. If the decision was made to map a goal or objective only once then it may have resulted in a more accurate reflection of the extent to which Connect is able to be mapped onto the Welsh curriculum. Secondly, only 3 educators were able to be recruited as reviewers for this mapping process. A larger sample of reviewers would have been beneficial to establish the reliability of the reviewer's mapping decisions. Thirdly, one of the educators recruited for the reviewing process already had prior experience of delivering Connect, while the other two had not engaged with the program before. This may have resulted in the reviewer with prior experience having significantly different thoughts about the mapping decisions made by the researcher due to their ability to reflect on how well they believed a Connect goal or objective met a certain curriculum description when they implemented the associated Connect lesson with their class. This could have been avoided by ensuring all educators had the same level of experience with the Connect program to establish consistency across the reviewing process. Finally, in the instructions for reviewers document (see appendix 3) reviewers were asked to add a comment if they disagreed with the researchers mapping or colour coding decision. It was intended that these comments would be used to gain further understanding of any disagreements. However, only one of the reviewers provided comments in their mapping review, leading the researcher to disregard the potential comment analysis due to a lack of data.

In future, researchers should seek to build on this research, by utilizing the findings of this mapping investigation to better adapt the Connect curriculum to meet the needs of the

health and well-being AoLE within the new curriculum for Wales. This would increase the likelihood of teachers in Wales feeling confident that the health and well-being content they are delivering fully covers the requirements of the national curriculum, and so may increase the use of Connect across the nation of Wales. Research should also take advantage of the mapping template created within this chapter to map Connect onto other national curriculum's using the recommendations made by the researcher. Connect is available throughout all English-speaking countries, however England, and now Wales, are the only nations with information explicitly available about how Connect meets national health and well-being requirements. Currently, researchers in Australia are interested in building on this research, by mapping Connect onto the Western Australian curriculum. These researchers should carefully consider whether or not to map Connect goals or objectives onto more than one Curriculum target, and should include a larger sample of reviewers, who have similar levels of experience with Connect. They should also consider asking reviewers more explicitly to provide comments about areas of disagreement so that they may be analysed in order to gain a better understanding of the thoughts of teachers surrounding the ability of Connect to meet the national curriculum.

## Conclusion

To conclude, the Connect health and well-being program covers 95.7% of health and well-being AoLE targets, with 59.1% of Connect learning objectives considered to map easily onto the health and well-being descriptions of learning. The Connect curriculum is further able to cover 96.6% of the Welsh RSE curriculum, with 55.9% of Connect learning objectives considered to map easily onto the RSE strand statements. Across all 3 reviewers examining this mapping process, there was a clear agreement that Connect is easier to map onto the health and well-being AoLE and RSE curriculum than previously stated by the researcher, reflecting the ability of the Connect program to comprehensively encompass the goals of the new curriculum for Wales. The conclusions of this mapping process are constrained by the study's limitations, which future research should seek to overcome by using larger, more representative reviewer samples, and by using a more refined mapping process. Future research should also seek to build on the conclusions of this mapping review by adapting the Connect program to meet the areas of the health and well-being AoLE highlighted by this investigation as unmet.

## References

Abdallah, S., Steuer, N., Marks, N., & Page, N. (2008). Well-being evaluation tools: A research and development project for the Big Lottery Fund. *London: New Economics Foundation*.

Akbari, M., Seydavi, M., Hosseini, Z. S., Krafft, J., & Levin, M. E. (2022). Experiential avoidance in depression, anxiety, obsessive-compulsive related, and posttraumatic stress disorders: A comprehensive rapid review and meta-analysis. *Journal of Contextual Behavioral Science*.

Armstrong, A. B., Morrison, K. L., & Twohig, M. P. (2013). A preliminary investigation of acceptance and commitment therapy for adolescent obsessive-compulsive disorder. *Journal of Cognitive Psychotherapy*, *27*(2), 175-190.

Azar, D., Ball, K., Salmon, J., & Cleland, V. (2008). The association between physical activity and depressive symptoms in young women: A review. *Mental Health and Physical Activity*, *1*(2), 82-88.

Bas, G., & Kivilcim, Z. S. (2017). Teachers' Views about Educational Research: A Qualitative Study. *International Journal of Progressive Education*, *13*(2), 60-73.

Basarkod, G. (2019). *The six ways to well-being (6W-WeB): A new measure of valued action that targets the frequency and motivation for six behavioural patterns that promote well-being* (Doctoral dissertation, Australian Catholic University).

Berman, N. C., Wheaton, M. G., McGrath, P., & Abramowitz, J. S. (2010). Predicting anxiety: The role of experiential avoidance and anxiety sensitivity. *Journal of anxiety disorders*, *24*(1), 109-113.

Biddle, S. J., & Asare, M. (2011). Physical activity and mental health in children and adolescents: a review of reviews. *British journal of sports medicine*, *45*(11), 886-895.

Biegel, G. M., Brown, K. W., Shapiro, S. L., & Schubert, C. M. (2009). Mindfulness-based stress reduction for the treatment of adolescent psychiatric outpatients: A randomized clinical trial. *Journal of consulting and clinical psychology*, *77*(5), 855.

Boniwell, I. (2006). Positive Psychology in a Nutshell (London: Personal Well-being Centre).

Bramwell, K., & Richardson, T. (2018). Improvements in depression and mental health after acceptance and commitment therapy are related to changes in defusion and values-based action. *Journal of contemporary psychotherapy*, *48*, 9-14.

Brown, K. M., Hoye, R., & Nicholson, M. (2012). Self-esteem, self-efficacy, and social connectedness as mediators of the relationship between volunteering and well-being. *Journal of Social Service Research*, *38*(4), 468-483.

Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *Journal of personality and social psychology*, *84*(4), 822.

Brugha, T. S., Weich, S., Singleton, N., Lewis, G., Bebbington, P. E., Jenkins, R., & Meltzer, H. (2005). Primary group size, social support, gender and future mental health status in a prospective study of people living in private households throughout Great Britain. *Psychological medicine*, *35*(5), 705-714.

Burnette, J. L., Knouse, L. E., Vavra, D. T., O'Boyle, E., & Brooks, M. A. (2020). Growth mindsets and psychological distress: A meta-analysis. *Clinical Psychology Review*, *77*, 101816.

Carr, A., Cullen, K., Keeney, C., Canning, C., Mooney, O., Chinseallaigh, E., & O'Dowd, A. (2021). Effectiveness of positive psychology interventions: a rapid review and meta-analysis. *The Journal of Positive Psychology*, *16*(6), 749-769.

Chi, X., Bo, A., Liu, T., Zhang, P., & Chi, I. (2018). Effects of mindfulness-based stress reduction on depression in adolescents and young adults: A rapid review and meta-analysis. *Frontiers in psychology*, *9*, 1034.

Ciarrochi, J., Parker, P. D., Sahdra, B. K., Kashdan, T. B., Kiuru, N., & Conigrave, J. (2017). When empathy matters: The role of sex and empathy in close friendships. *Journal of personality*, *85*(4), 494-504.

Ciarrochi, J., Sahdra, B. K., Hawley, P. H., & Devine, E. K. (2019). The upsides and downsides of the dark side: A longitudinal study into the role of prosocial and

antisocial strategies in close friendship formation. *Frontiers in Psychology*, *10*, 114.

Cohen, G. L., & Sherman, D. K. (2014). The psychology of change: Self-affirmation and social psychological intervention. *Annual review of psychology*, *65*, 333-371.

Cohen, S. (2004). Social relationships and health. *American psychologist*, *59*(8), 676.

Connect PSHE (2021). *Our story*. Retrieved from Connect PSHE (connect-pshe.org)

Creswell, J. D. (2017). Mindfulness interventions. *Annual review of psychology*, *68*, 491-516.

Creswell, J. D., Welch, W. T., Taylor, S. E., Sherman, D. K., Gruenewald, T. L., & Mann, T. (2005). Affirmation of personal values buffers neuroendocrine and psychological stress responses. *Psychological science*, *16*(11), 846-851.

Danner, D. D., Snowdon, D. A., & Friesen, W. V. (2001). Positive emotions in early life and longevity: findings from the nun study. *Journal of personality and social psychology*, *80*(5), 804.

Davey, M., Eaker, D. G., & Walters, L. H. (2003). Resilience processes in adolescents: Personality profiles, self-worth, and coping. *Journal of adolescent research*, *18*(4), 347-362.

Davis, C. H., Gaudiano, B. A., McHugh, L., & Levin, M. E. (2021). Integrating storytelling into the theory and practice of contextual behavioral science. *Journal of Contextual Behavioral Science*, *20*, 155-162.

Dekeyser, M., Raes, F., Leijssen, M., Leysen, S., & Dewulf, D. (2008). Mindfulness skills and interpersonal behaviour. *Personality and individual differences*, *44*(5), 1235-1245.

Feinstein*, L., & Hammond, C. (2004). The contribution of adult learning to health and social capital. *Oxford Review of Education*, *30*(2), 199-221.

Fredrickson, B. L., Tugade, M. M., Waugh, C. E., & Larkin, G. R. (2003). What good are positive emotions in crisis? A prospective study of resilience and emotions following the terrorist attacks on the United States on September 11th, 2001. *Journal of personality and social psychology*, *84*(2), 365.

Gámez, W., Chmielewski, M., Kotov, R., Ruggero, C., & Watson, D. (2011). Development of a measure of experiential avoidance: the Multidimensional Experiential Avoidance Questionnaire. *Psychological assessment*, *23*(3), 692.

Gil, K. M., Carson, J. W., Porter, L. S., Scipio, C., Bediako, S. M., & Orringer, E. (2004). Daily mood and stress predict pain, health care use, and work activity in African American adults with sickle-cell disease. *Health Psychology*, *23*(3), 267.

Gloster, A. T., Walder, N., Levin, M. E., Twohig, M. P., & Karekla, M. (2020). The empirical status of acceptance and commitment therapy: A review of meta-analyses. *Journal of Contextual Behavioral Science*, *18*, 181-192.

Goswami, U. (2008). *Cognitive development: The learning brain*. Psychology Press.

Haack, M., & Mullington, J. M. (2005). Sustained sleep restriction reduces emotional and physical well-being. *Pain*, *119*(1-3), 56-64.

Hakkarainen, R., Partonen, T., Haukka, J., Virtamo, J., Albanes, D., & Lönnqvist, J. (2004). Food and nutrient intake in relation to mental well-being. *Nutrition Journal*, *3*(1), 1-5.

Hammond, C. (2003). How education makes us healthy [1]. *London Review of Education*.

Hancock, K. M., Swain, J., Hainsworth, C. J., Dixon, A. L., Koo, S., & Munro, K. (2018). Acceptance and commitment therapy versus cognitive behavior therapy for children with anxiety: Outcomes of a randomized controlled trial. *Journal of Clinical Child & Adolescent Psychology*, *47*(2), 296-311.

Harris, R. (2006). Embracing your demons: An overview of acceptance and commitment therapy. *Psychotherapy in Australia*, *12*(4), 70-6.

Hayes, L. L., & Ciarrochi, J. V. (2015). *The thriving adolescent: Using acceptance and commitment therapy and positive psychology to help teens manage emotions, achieve goals, and build connection*. New Harbinger Publications.

Hayes, S. C., Luoma, J. B., Bond, F. W., Masuda, A., & Lillis, J. (2006). Acceptance and commitment therapy: Model, processes and outcomes. *Behaviour research and therapy*, *44*(1), 1-25.

Hogeveen, J., & Grafman, J. (2021). Alexithymia. *Handbook of clinical neurology*, *183*, 47-62.

Hughes, S., & Lewis, H. (2020). Tensions in current curriculum reform and the development of teachers' professional autonomy. *The curriculum journal*, *31*(2), 290-302.

Hulbert-Williams, L., Hochard, K. D., Hulbert-Williams, N., Archer, R., Nicholls, W., & Wilson, K. (2016). Contextual behavioural coaching: An evidence-based model for supporting behaviour change. BPS.

Huppert, F. A. (2009). Psychological well-being: Evidence regarding its causes and consequences. *Applied psychology: health and well-being*, *1*(2), 137-164.

Keng, S. L., Smoski, M. J., & Robins, C. J. (2011). Effects of mindfulness on psychological health: A review of empirical studies. *Clinical psychology review*, *31*(6), 1041-1056.

Kim, J. H., Keck, P., Miller, D., & Gonzalez, R. (2012). Introduction to positive psychology: overview and controversies. *Journal of Asia Pacific Counseling*, *2*(1), 45-60.

Kim, J., & Morgül, K. (2017). Long-term consequences of youth volunteering: Voluntary versus involuntary service. *Social science research*, *67*, 160-175.

Krueger, R. F., Hicks, B. M., & McGue, M. (2001). Altruism and antisocial behavior: Independent tendencies, unique personality correlates, distinct etiologies. *Psychological Science*, *12*(5), 397-402.

Larsson, A., Hooper, N., Osborne, L. A., Bennett, P., & McHugh, L. (2016). Using brief cognitive restructuring and cognitive defusion techniques to cope with negative thoughts. *Behavior modification*, *40*(3), 452-482.

Letenneur, L., Proust-Lima, C., Le Gouge, A., Dartigues, J. F., & Barberger-Gateau, P. (2007). Flavonoid intake and cognitive decline over a 10-year period. *American journal of epidemiology*, *165*(12), 1364-1371.

Li, S., Xu, Q., & Zhou, A. (2022). Follow-up to a randomized controlled trial of the effect of self-affirmation on anxiety during the COVID-19 pandemic. *Psychology, Health & Medicine*, *27*(2), 361-366.

Livheim, F., Hayes, L., Ghaderi, A., Magnusdottir, T., Högfeldt, A., Rowse, J., ... & Tengström, A. (2015). The effectiveness of acceptance and commitment therapy for adolescent mental health: Swedish and Australian pilot outcomes. *Journal of Child and Family Studies*, *24*, 1016-1030.

Long, S. J., Hawkins, J., Murphy, S., & Moore, G. (2023). School health and well-being and national education system reform: A qualitative study. *British Educational Research Journal*.

Lydon-Staley, D. M., Zurn, P., & Bassett, D. S. (2020). Within-person variability in curiosity during daily life and associations with well-being. *Journal of personality*, *88*(4), 625-641.

Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success?. *Psychological bulletin*, *131*(6), 803.

Lyubomirsky, S., Tkach, C., & Sheldon, K. M. (2004). Pursuing sustained happiness through random acts of kindness and counting one's blessings: Tests of two six-week interventions. *Unpublished raw data*, 111-131.

Mandavia, A., Masuda, A., Moore, M., Mendoza, H., Donati, M. R., & Cohen, L. L. (2015). The application of a cognitive defusion technique to negative body image thoughts: A preliminary analogue investigation. *Journal of Contextual Behavioral Science*, *4*(2), 86-95.

McPhie, M. L., & Rawana, J. S. (2015). The effect of physical activity on depression in adolescence and emerging adulthood: A growth-curve analysis. *Journal of adolescence*, *40*, 83-92.

Michel, A., Groß, C., Hoppe, A., González-Morales, M. G., Steidle, A., & O'Shea, D. (2021). Mindfulness and positive activities at work: Intervention effects on motivation-related constructs, sleep quality, and fatigue. *Journal of Occupational and Organizational Psychology*, *94*(2), 309-337.

Mirowsky, J., & Ross, C. E. (2017). Social causes of psychological distress, New York. *NY: Routledge*.

New Economics Foundation (2008, October 22). *Five Ways to Well-being*. Retrieved from Microsoft Word - Five_ways_to_well-being the evidence.doc (neweconomics.org)

Orsolini, L. (2020). Unable to describe my feelings and emotions without an addiction: the interdependency between alexithymia and addictions. *Frontiers in Psychiatry*, *11*, 543346.

Peterson, C., Ruch, W., Beermann, U., Park, N., & Seligman, M. E. (2007). Strengths of character, orientations to happiness, and life satisfaction. *The journal of positive psychology*, *2*(3), 149-156.

Power, S., Newton, N., & Taylor, C. (2020). 'Successful futures' for all in Wales? The challenges of curriculum reform for addressing educational inequalities. *The curriculum journal*, *31*(2), 317-333.

Reangsing, C., Punsuwun, S., & Schneider, J. K. (2021). Effects of mindfulness interventions on depressive symptoms in adolescents: A meta-analysis. *International journal of nursing studies*, *115*, 103848.

Roffey, S., Williams, A., Greig, A., & MacKay, T. A. W. N. (2016). Mental health and well-being in schools: Concerns, challenges and opportunities. *Educational and child Psychology*, *33*(4), 5-7.

Rowe, J. W., & Kahn, R. L. (1998). Successful Aging: The Macarthur Foundation Study, 36–52.

Rowsell, H. C., Ciarrochi, J., Deane, F. P., & Heaven, P. C. (2016). Emotion identification skill and social support during adolescence: A three-year longitudinal study. *Journal of Research on Adolescence*, *26*(1), 115-125.

Rowsell, H. C., Ciarrochi, J., Heaven, P. C., & Deane, F. P. (2014). The role of emotion identification skill in the formation of male and female friendships: A longitudinal study. *Journal of adolescence*, *37*(2), 103-111.

Rudd, B. N., & Beidas, R. S. (2020). Digital mental health: the answer to the global mental health crisis?. *JMIR mental health*, *7*(6), e18472.

Sahdra, B. K., Ciarrochi, J., Parker, P. D., Marshall, S., & Heaven, P. (2015). Empathy and nonattachment independently predict peer nominations of prosocial behavior of adolescents. *Frontiers in psychology*, 263.

Sax, L. J., Bryant, A. N., & Gilmartin, S. K. (2002). A Longitudinal Investigation of Emotional Health among First-Year College Students: Comparisons of Women and Men.

Shifeng, L. I., Yiling, W. U., Fumin, Z. H. A. N. G., Qiongying, X. U., & Aibao, Z. H. O. U. (2020). Self-affirmation buffering by the general public reduces anxiety levels during the COVID-19 epidemic. *Acta Psychologica Sinica*, *52*(7), 886.

Shimai, S., Otake, K., Park, N., Peterson, C., & Seligman, M. E. (2006). Convergence of character strengths in American and Japanese young adults. *Journal of Happiness Studies*, *7*, 311-322.

Silton, R. L., Kahrilas, I. J., Skymba, H. V., Smith, J., Bryant, F. B., & Heller, W. (2020). Regulating positive emotions: Implications for promoting well-being in individuals with depression. *Emotion*, *20*(1), 93.

Uchino, B. N. (2004). *Social support and physical health: Understanding the health consequences of relationships*. Yale university press.

United Nations, 2015. *Transforming Our World: The 2030 Agenda for Sustainable Development*. New York: UN Publishing.

Watson, C., Burley, M. C., & Purdon, C. (2010). Verbal repetition in the reappraisal of contamination-related thoughts. *Behavioural and Cognitive Psychotherapy*, *38*(3), 337-353.

Welsh Government (2020) *Curriculum for Wales*. Retrieved from Curriculum for Wales - Hwb (gov.wales)

Welsh Government (2021, March 15). *Framework on embedding a whole-school approach to emotional and mental well-being.* Retrieved from WG42005 (gov.wales)

Woidneck, M. R., Morrison, K. L., & Twohig, M. P. (2014). Acceptance and commitment therapy for the treatment of posttraumatic stress among adolescents. *Behavior Modification*, *38*(4), 451-476.

Yeager, D. S., & Dweck, C. S. (2012). Mindsets that promote resilience: When students believe that personal characteristics can be developed. *Educational psychologist*, *47*(4), 302-314.

# Appendix

Appendix 1: spreadsheet showing researchers process of mapping Connect to the health and well-being AoLE

Mapping of Connect to health and well-beingAoLE.xlsx

Appendix 2: spreadsheet showing researchers process of mapping Connect to the Welsh RSE curriculum

Mapping of Connect to RSE curriculum.xlsx

Appendix 3: Instructions for reviewers.

**Instructions for reviewers:**

We are interested in knowing if you (the reviewer) agree/disagree with the researcher's mapping of the Connect curriculum lesson objectives onto the Health and well-being AoLE Welsh 'what matters Statements' learning outcomes for reception to year 6, including additional lessons and the Relationships and Sexual Education (RSE) strand.

The researcher has taken the curriculum objectives from the Connect lesson plans for each year group and mapped them onto what they believe to be an appropriate 'What Matters Statement' learning outcome from the H&W AoLE. The researcher has then used a traffic light system to colour code this decision, whereby:

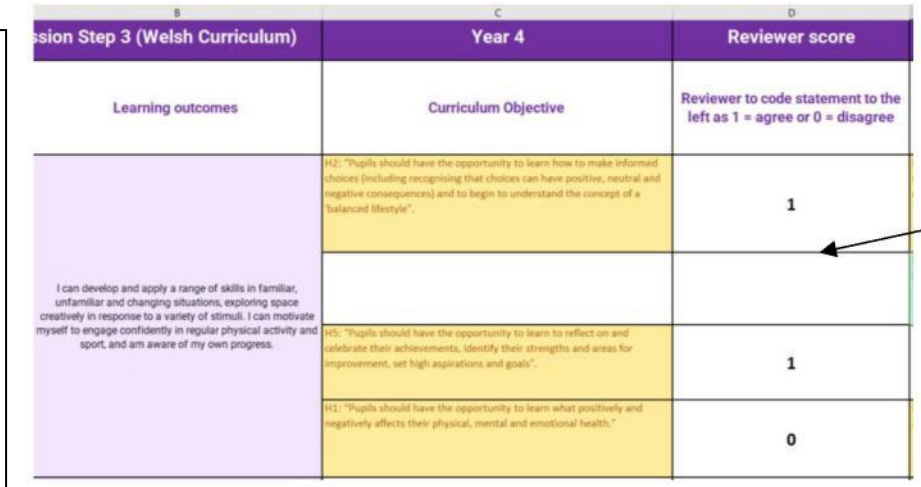
- green = Curriculum objective is able to be easily mapped onto this achievement outcome
- yellow/orange = Curriculum objective is able to be somewhat/partially mapped onto this achievement outcome
- red = Curriculum objective is difficult to map onto this achievement outcome.

The key for this system can also be found on the mapping excel spreadsheet.

This mapping is organised by progression step, where reception has been mapped onto progression step 1, years 1, 2 and 3 have been mapped onto progression step 2, and years 4, 5 and 6 have been mapped onto progression step 3. These can be found under each tab on the spreadsheet.

On the mapping excel spreadsheet, for each year group there is a column demonstrating how the Connect curriculum objective has been mapped and colour coded (e.g. column c year 4 in the image below). To the right of this, for each year group, there is a column for the reviewers to enter their score (e.g. column D reviewer score in the image below).

If you disagree with the researcher's decision to map this connect curriculum objective onto this 'What Matters Statement' learning outcome, then please enter a 0 in the 'reviewer score' column next to the corresponding mapped curriculum objective.

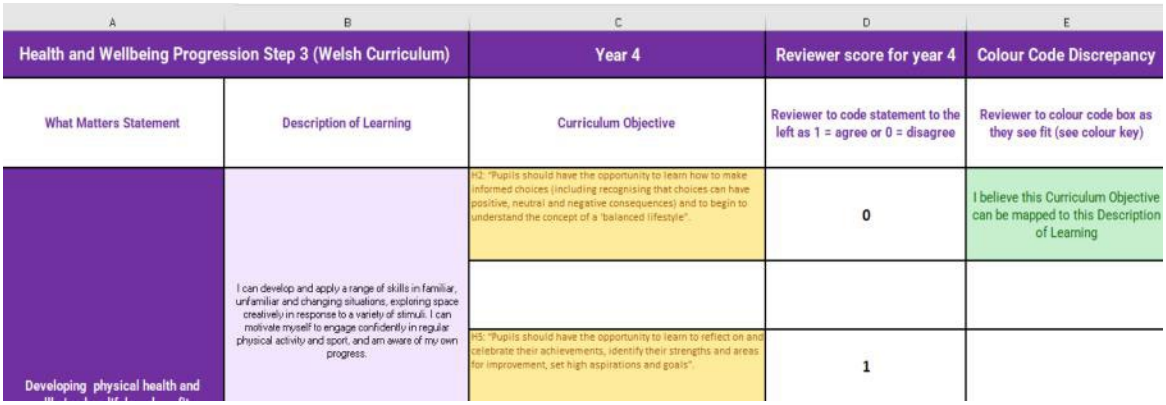


| B | C | D |
|---|---|---|
| ssion Step 3 (Welsh Curriculum) | Year 4 | Reviewer score |
| Learning outcomes | Curriculum Objective | Reviewer to code statement to the left as 1 = agree or 0 = disagree |
| I can develop and apply a range of skills in familiar, unfamiliar and changing situations, exploring space creatively in response to a variety of stimuli. I can motivate myself to engage confidently in regular physical activity and sport, and am aware of my own progress. | H2: "Pupils should have the opportunity to learn how to make informed choices (including recognising that choices can have positive, neutral and negative consequences) and to begin to understand the concept of a 'balanced lifestyle'". | 1 |
| | | |
| | H5: "Pupils should have the opportunity to learn to reflect on and celebrate their achievements, identify their strengths and areas for improvement, set high aspirations and goals". | 1 |
| | H1: "Pupils should have the opportunity to learn what positively and negatively affects their physical, mental and emotional health." | 0 |

If you agree with the researcher's decision to map this connect curriculum objective onto this 'What Matters Statement' learning outcome, then please enter a 1 in the 'reviewer score' column next to the corresponding mapped curriculum objective.

Please enter a score in each row of the column where there is a mapped curriculum objective to the left. For rows where there is no mapped curriculum objective to the left, please leave this space blank.

In addition, if you disagree with the researcher's colour code decision (i.e. green = maps easily, orange/yellow = can be partially mapped, red = difficult to map) please add the colour code you believe it should be in the end column named 'Colour code discrepancy' with a brief explanation in the same cell. See below for an example:



| A | B | C | D | E |
|---|---|---|---|---|
| Health and Wellbeing Progression Step 3 (Welsh Curriculum) | | Year 4 | Reviewer score for year 4 | Colour Code Discrepancy |
| What Matters Statement | Description of Learning | Curriculum Objective | Reviewer to code statement to the left as 1 = agree or 0 = disagree | Reviewer to colour code box as they see fit (see colour key) |
| Developing physical health and | I can develop and apply a range of skills in familiar, unfamiliar and changing situations, exploring space creatively in response to a variety of stimuli. I can motivate myself to engage confidently in regular physical activity and sport, and am aware of my own progress. | H2: "Pupils should have the opportunity to learn how to make informed choices (including recognising that choices can have positive, neutral and negative consequences) and to begin to understand the concept of a 'balanced lifestyle'." | 0 | I believe this Curriculum Objective can be mapped to this Description of Learning |
| | | | | |
| | | H5: "Pupils should have the opportunity to learn to reflect on and celebrate their achievements, identify their strengths and areas for improvement, set high aspirations and goals". | 1 | |

In some cases, the same curriculum objective will appear twice. This will be due to the fact that the researcher feels that the curriculum objective is able to be mapped onto more than one 'What Matters Statement' learning outcome, or the curriculum objective appears in lesson plans for more than one year group (e.g. for both a year 5 and year 6 class). In either case, please enter a score for all repeated curriculum objectives.

If you have any questions at all, please feel free to get in contact at any time:

Email – katespurdle@outlook.com

Mobile – 07732393274

Appendix 4: spreadsheet showing the process undertaken by reviewer 1 who reviewed the mapping of Connect to the Welsh RSE curriculum

Reviewer 1 process.xlsx

Appendix 5: spreadsheet showing the process undertaken by reviewer 2 who reviewed the mapping of Connect to the health and well-being AoLE for progression steps 1 and 2

Reviewer 2 process.xlsx

Appendix 6: spreadsheet showing the process undertaken by reviewer 3 who reviewed the mapping of Connect to the health and well-being AoLE for progression step 3

Reviewer 3 process.xlsx

Appendix 7: spreadsheet showing total reviewer analysis

Total reviewer analysis.xlsx

## Chapter 4: What are the views, perceptions and experiences of teachers delivering the Connect curriculum to KS2 children in primary school?

### Literature review

Recap of findings in chapters 1 and 2

In Chapter 1, the author sought to examine the use and empirical evidence-base of current health and well-being programs in UK primary schools. The results demonstrated that the majority of UK school-based health and well-being interventions lack a robust evidence-base, with very few reporting positive causal impacts on pupil outcomes (Pegram, Watkins, Hoerger & Hughes, 2022). When support has been found, investigations are often poor in quality and methodologically flawed (Mackenzie & Williams, 2018; Stallard, 2013; Sancassiani et al., 2015). This means it is very difficult to endorse them as viable health and well-being interventions. Recent research has highlighted how important the factors of resilience (Tamarit, Del La Barrera, Schoeps, Castro-Calvo & Montoya-Castilla, 2023) and psychological flexibility (Prudenzi, Graham, Rogerson & O'Connor, 2021) are when it comes to coping with stressful events, overcoming challenging circumstances, and maintaining general well-being. Since the outbreak of COVID-19, the already declining mental well-being of young people in the UK has suffered even further (Elharake, Akbar, Malik, Gilliam & Omer, 2022). It is therefore more important than ever that we address this by increasing both the Resilience and Psychological flexibility of young people. A promising way of doing this is to implement health and Well-being curricula that aim to promote both factors amongst young learners. One such health and well-being curriculum is called 'Connect', a PSHE program which aims to build up young people's ability to become psychologically flexible and resilient (Connect PSHE, 2021).

Chapter 2 reports the process taken for mapping Connect PSHE onto the Curriculum for Wales (Welsh Government, 2020) and provides a reflection of fit based on a co-established analysis between practitioners implementing the Curriculum for Wales and researchers. This process revealed that Connect as a program reflects the values and goals of the Welsh curriculum's health and well-being AoLE. Connect was able to be successfully mapped onto 96% of the Welsh curriculum, meaning that it covers almost all health and well-being targets set by the department of education for

Wales. This evidence, paired with the strong theoretical and scientific underpinnings of the program would suggest that Connect is a viable and beneficial intervention through which to deliver health and well-being education to pupils in Wales.

## The evidence base underpinning the Connect curriculum

The evidence presented in chapter 2 provides a strong foundation from which education researchers can now begin the process of adapting the Connect curriculum to the curriculum for Wales, so that it better meets the health and wellbeing needs of its pupils. As Connect is a relatively new curriculum, investigatory research assessing the program's impact on children's emotional, physical and mental health is still in the early stages. Recently, Nisar et al. (2023) conducted the first randomized control trial of Connect PSHE, investigating the impact on primary school pupils' mental well-being. A sample of 742 pupils from 20 primary schools in North Wales participated in the trial. The intervention was delivered for 12 weeks by teachers who had received training via the Connect online training platform and involved pupils receiving a single one-hour lesson of Connect PSHE curriculum per week. Half of the schools received additional implementation support from a research officer, and half received no additional support. The trial found that 12 weeks of the Connect intervention had a small but significant impact on young pupil's self-reported and teacher-reported mental well-being at follow-up. There was no significant impact of additional implementation support on the main well-being measures, yet there was a small but significant reduction in conduct problems and increase in prosocial behaviour in the additional support arm. It may therefore be that the additional implementation support enabled teachers to ask questions about best conditions for delivery, address any problems and seek reassurance. This may have boosted the ability of teachers to deliver the program with greater confidence and ease, leading to greater intervention success.

This RCT has provided us with a crucial piece of preliminary evidence about the program in terms of improving the health and well-being of UK primary school pupils, particularly when implementation support is provided, and implementation fidelity is therefore increased. However, as it was beyond the scope of the research to access teacher's views and opinions about this support, we can only speculate about

the mechanisms through which this additional guidance was able to significantly impact challenging and prosocial behaviour. We are also unaware of how well the teachers accepted the program as a means to deliver well-being education, of any challenges they faced during training or implementation, of any additional benefits to student well-being or behaviour, and of more specific details about how the children interacted with the program, specifically the DNA-V model (Hayes & Ciarrochi, 2015). Therefore, further qualitative research is needed as a means of collecting teachers' perspectives and opinions on the Connect curriculum and how they found the program when implementing it within their own setting.

### Qualitative investigations of health and well-being interventions

Qualitative research has been recognised as an increasingly important area of scientific literature (Flemming & Noyes, 2021), as when carried out rigorously and transparently, it can allow researchers to access a rich source of information, that can provide the answer to questions left unanswered by quantitative investigations (Rust et al., 2017). Previous qualitative investigations of health and well-being programs across the UK have been able to delve into the mechanisms behind successful interventions. They are able to access the thoughts of school staff, parents and pupils themselves about how they feel about certain interventions, and offer the reader a more well-rounded picture of the influence UK wide interventions can have on health and well-being. For example, one investigation of the PATHS intervention demonstrated that the program had a positive influence on children's emotional intelligence and interpersonal skills when quantitative research was carried out, but it was qualitative interviews with staff that revealed that the program was also believed to have an impact on children's empathy and problem solving (Curtis & Norgate, 2007). Another investigation revealed that PATHS had a positive impact on children's emotional regulation, emotional sensitivity and empathy. Crucially, interviews with class teachers demonstrated that they believed these improvements were due to the impact of the program, rather than external or confounding variables (Kelly, Longbottom, Potts & Williamson, 2004). Furthermore, an investigation of PATHS undertaken by Humphrey et al. (2016) yielded insignificant quantitative results, but qualitative data revealed that the intervention was believed to improve social-emotional learning.

A number of qualitative studies have been able to provide additional information as to how health and well-being interventions are able to positively influence behaviour and cognition. One investigation of The Incredible Years, and two investigations of SEAL, all reported positive quantitative findings, but qualitative research revealed that in all three investigations, the mechanism underlying such improvements was thought to be through the provision of benefits for both pupils and staff, via the creation of a calm, friendly (Hutchings, Lane, Owen & Gwyn, 2004) and inclusive (Banerjee, Weare & Farr, 2014) school environment, and by offering staff the opportunity to place themselves in their pupils shoes (Hallam, 2009). The positive results yielded by both Stallard et al. (2005) and Hutchings et al. (2007) when investigating FRIENDS and The Incredible Years respectively, were thought to be related to the enjoyable and engaging nature of the interventions, as was revealed in qualitative interviews. Finally, both Attwood, Meadows, Stallard and Richardson (2012) and Connolly et al.'s (2018) respective investigations of a CBT-based program and the Roots of Empathy program, revealed positive quantitative results, yet interviews with both pupils and school staff revealed that some of the CBT components were too difficult for younger children to understand (Attwood et al., 2012), and that the Roots of empathy program lacked fun and creativity, and was too rigid (Conolly et al., 2018).

All these studies highlight how important it is to conduct thorough qualitative research when investigating the impact of a health and well-being intervention at a primary school level, as interviews can uncover crucial findings that are often missed when only quantitative data is considered. Therefore, the researcher decided to build on the work of Nisar et al. (2023), by conducting qualitative research aiming to investigate the question 'What are the views, perceptions and experiences of teachers delivering the Connect curriculum to KS2 children in primary school?'. It was decided that the researcher would carry out semi-structured interviews with teachers across north Wales who had originally been part of the RCT, to access their acceptability of the Connect program. The data obtained through these interviews was to be examined using thematic content analysis (TCA) (Braun & Clarke, 2006).

## Methods

### The intervention

The intervention consisted of a 12-week trial of the Connect PSHE program (Connect PSHE, 2021), which teaches children about how to take care of their bodies and mental Well-being. The curriculum aims specifically to increase the psychological flexibility and resilience of young learners. Connect is delivered on a weekly basis by trained teachers, however, teachers are encouraged to embed the teachings of Connect throughout the school day in a cross-curricula manner. In the present investigation, 20 teachers received the comprehensive connect training over a period of two days (see appendices 12 and 13). On day two, teachers were taught about the theoretical underpinnings and evidence base underlying Connect. On day two, teachers were introduced the ACT and DNA-V models, as well as six ways to wellbeing. Teachers were then given an overview of the Connect program, including how it is organised and what delivery of a Connect lesson involves. On completion of this training, teachers were then asked to implement Connect with a class of primary aged pupils for 12 weeks. A total of 742 pupils took part in the trial from 20 schools across North Wales. During this trial implementation period, half of the teachers received additional implementation support from a research officer, Dr Jane Pegram, once every half term. the other half of the teachers received no additional support.

### Participants

Full ethical approval was granted before participant recruitment began. The participants were 20 primary school teachers who had been trained to deliver Connect, and then proceeded to implement the program with their pupils for 12 weeks. The participants were part of a larger sample originally recruited via opportunity sampling by researchers in a Nisar et al's. (2023) quantitative study. Teachers who had initially signed up to the RCT of Nisar et al.'s (2023) study were invited via email or phone call to take part in interviews investigating teachers' views about the Connect intervention. 7 out of 20 teachers involved in the RCT trial agreed to take part in the current research, and after reading the information sheet all provided informed consent (see appendices 1 and 2).

**Table 1**

*information about participants*

| Participant ID | Gender | Role in school | Implementation support received |
|---|---|---|---|
| Interviewee 1 | Male | Year 3 class teacher | Yes |
| Interviewee 2 | Female | Year 4 and 6 class teacher responsible for IT, Science and Health and Well-being across the school | No |

| | | | |
|---|---|---|---|
| Interviewee 3 | Male | Headteacher | Yes |
| Interviewee 4 | Female | Year 5 class teacher | Yes |
| Interviewee 5 | Female | Year 3 class teacher | No |
| Interviewee 6 | Female | Year 2 class teacher health and well-being co-ordinator | Yes |
| Interviewee 7 | Female | Year 2 class teacher Health and well-being co-ordinator | Yes |

## The Interviews

The interview schedule consisted of 16 open questions organised into 5 topics; implementation, training and teaching resources, ongoing support, outcomes, and wider implications (see appendix 3). The open nature of these questions encouraged participants to reflect on their specific experiences when implementing Connect, whilst allowing them to expand their answers and include any additional details they thought relevant. 6 interviews were conducted virtually over Microsoft Teams, and 1 interview was conducted in person. All interviews lasted between 20 and 45 minutes, and were conducted between June and November 2022.

## Data Collection

All interviews were recorded using the Voice Memos app on an iPhone. The interviews were then transcribed, partially by the researcher using Microsoft Word, and partially by Otter AI transcription software (See appendices 4-9). The data was

anonymised and stored securely in a password protected computer file, before being exported into a Microsoft Excel spreadsheet for analysis (See appendix 10).

## Method of Analysis

Thematic Content Analysis (TCA) was used to analyse the data. Braun and Clarke (2006) define TCA as a 'method of identifying, analysing and reporting patterns (or themes) within data'. In addition, researchers used Microsoft Excel to organise themes and codes in line with Bree and Gallagher's (2016) approach. This approach includes several steps as outlined by Braun and Clarke (2006) but is widely considered to be a more rigorous and reliable process. An inductive 'data-driven' approach was used to analyse the data, whereby data was analysed without trying to fit it into a pre-existing coding frame, or without trying to prove or disprove an existing theory (Nowell, Norris, White & Moules, 2017). The research question being explored was as follows; 'What are the views, perceptions and experiences of teachers delivering the Connect curriculum to KS2 children in primary school?'

The first step involved conducting, recording and transcribing the interviews. As the researcher conducted the interviews, and was involved in the partial transcription of the data, they approached the analysis with some previous ideas about what the data contained, however, any ideas about themes or patterns in the data set were recorded during the interviews in the beginnings of a reflexive journal. These notes were initially written on paper by the researcher during the interviews and were later transcribed electronically using the notes function in Microsoft Word, where each comment linked to its corresponding highlighted section of text. The researcher then fully immersed themselves with the data set, by reading over each transcribed interview at least twice in a line-by-line process. Additional notes were included during this process, to represent the researcher's views and ideas about developing theories, codes and themes (Lincon & Guba, 1985). Once the researcher was familiar with the dataset, all transcripts and notes were exported to an Excel document.

Following this, the researcher began the process of coding the data. This involved attaching a code to each relevant section of text, with a code being a label,

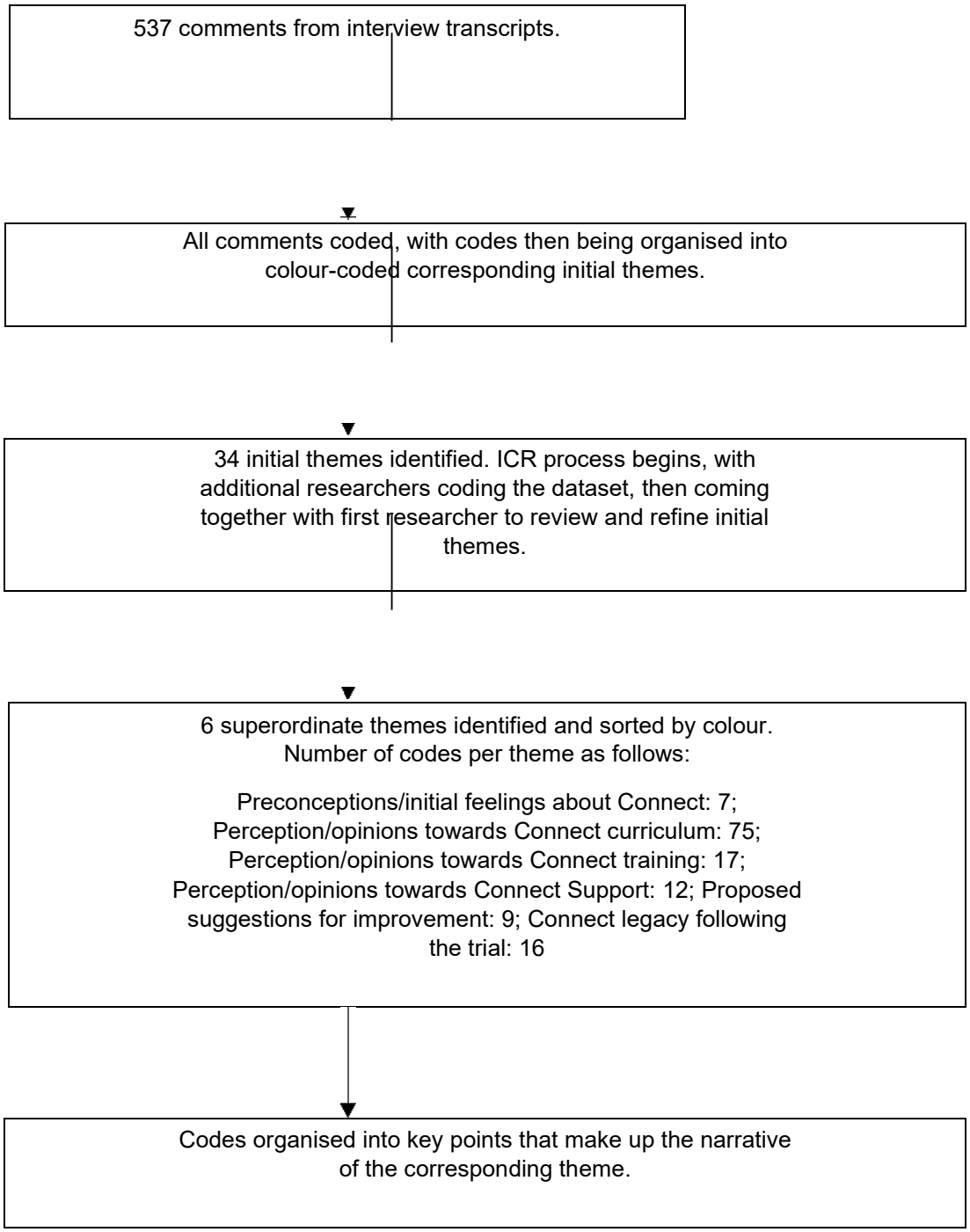
usually consisting of a single word or phrase, that captures the essence of the relevant section of text. This process was performed on a single sheet in Excel, where sections of text were situation in one column, and the corresponding code situated in an adjacent column. Reflexive notes were taken throughout this process to represent any ideas about initial themes beginning to emerge. The researcher then organized the codes into meaningful groups. These groups comprised the themes of the thematic analysis. DeSantis and Ugarriza (2000) define a theme as something that 'captures and unifies the nature or basis of the experience into a meaningful whole'. This process was completed in excel, where each code was grouped into a theme, with each theme sitting in the adjacent column being coloured differently. This process led to the identification of 34 themes, each of which were a different colour. The themes were then able to be sorted by colour, using the sort tool in Excel, meaning that each code corresponding to a theme could be grouped together.

The codes for each theme were then examined to ensure they fit the theme, and that the narrative for each theme made sense. Following this, all themes were reviewed to assess whether any of the individual themes needed to be collapsed into broader overarching themes, split into 2 themes, or discarded. This process ends when the researcher has a concise number of themes that tell the story contained within the data (Braun & Clarke, 2006). At this stage, in order to assess the credibility of the researcher's coding decisions, Intercoder Reliability (ICR) was undertaken. This is a process whereby a second researcher indicates the extent to which they agreed with the initial researcher's coding decisions (MacPhail, Khoza, Abler & Ranganathan, 2016). An ICR score is then generated, with higher scores indicating greater credibility. The initial ICR score for this investigation was 99.3%, and following further discussion with the second researcher, 100% ICR was established.

Ultimately, 6 main themes were identified, each of which comprised of a number of subthemes. The 6 themes were; preconceptions/initial feelings about Connect, perceptions/opinions towards Connect curriculum, perceptions/opinions towards Connect training, perceptions/opinions towards Connect support, proposed suggestions for improvement, Connect legacy following the trial.

**Figure 1**

*Flow chart describing the Thematic Content Analysis process*



## Results

### Table 2

*List of Themes and Sub-themes*

| Theme | Sub-themes |
|---|---|
| **1. Preconceptions / initial feelings about Connect** | 1.1 Initial concerns |
| **2. Perception / opinions towards Connect curriculum** | 2.1 Benefits<br>- Resources and lessons<br>- Application to the new curriculum for Wales<br>- Generalisation to areas outside of Connect lessons.<br>- Strengthening the relationship between teacher and pupil<br><br>2.2 Challenges during implementation<br>- Difficult content<br>- Time Constraints<br>- Usability<br>2.3 Overcoming initial concerns |
| **3. Perception / opinions towards Connect training** | 3.1 Benefits |
| **4. Perception / opinions towards Connect Support** | 4.1 Easily accessible support<br><br>4.2 Visits from research officer not necessary |

| | |
|---|---|
| **5. Proposed suggestions for improvement** | 5.1 Pupil voice<br>5.2. School-home link |
| **6. Connect legacy following the trial** | 6.1 The need for Connect<br>6.2 Continued Connect use and suggested improvements<br>➢ Desire for longer implementation period<br>➢ Time of year<br>➢ Training interface<br>➢ Connect link to progression steps |

1. Preconceptions / initial feelings about Connect

## 1.1 Initial concerns

Despite all of the teachers reporting that they approached Connect with an open mind, and expressing that they were willing to give the intervention a go, three out of seven teachers reported having some initial concerns about using the program. Concerns included not having enough time to implement Connect during an already busy teaching week, the content of the curriculum, and the mindfulness element.

> Interviewee 2: *"the first thing I thought was.. .I want to do this, but have we got the time?'"*
>
> Interviewee 6: *"one of the biggest concerns.. .when do we fit it in."*

One of the teachers also expressed initial concerns about the content of the Connect sessions. The teacher, who studied Psychology at degree level, expressed concerns

that the content may be too difficult for the pupils receiving the lessons, and for the staff delivering the lessons, if they did not possess a foundational knowledge of the psychological underpinnings of the program.

> Interviewee 6: *“I did think like, this is going to be too in depth for some of the pupils, it's going to be too in depth for some of the staff.”*

Two of the of the teachers were also apprehensive about the mindfulness aspect of the program at first, and explained that before Connect, it wasn’t a practice that they would incorporate into their daily lives or teaching practices.

> Interviewee 6: "I didn’t think mindfulness was really my thing, I kind of always thought it was a little bit airy fairy.”

> Interviewee 1: “*I’m not into all that, but I actually felt like quite relaxed when I’d done it.*”

2. Perception / opinions towards Connect curriculum

**2.1 Benefits**

Resources and lessons

The majority of teachers were very positive about the Connect resources, and overall felt that they were useful, engaging and user-friendly. In particular, six out of seven teachers commented about how they enjoyed the structured nature of the program, explaining that it was easy to follow and incredibly useful to have a PSHE curriculum that was already planned and ready to use. This seemed to be invaluable to teaching staff who were already juggling very busy teaching schedules, and had limited time to factor in additional planning.

> Interviewee 6: *"so the plans are really good like they're in depth. It literally is like a script for you to kind of read and it tells you what resources and anything that we need to print out, It's just all there."*

Four out of the seven teachers interviewed also expressed how easy it was to navigate the Connect website and find the resources that were needed to deliver the content.

Interviewee 7: *"the website is really easy to manoeuvre, you just click on that, get that"*

Three out of the seven teachers also made comments about how enjoyable and engaging the resources were for the children. they explained that the resources were fun and entertaining for pupils, and that pupils were able to really connect with the characters of the noticer, discoverer and advisor.

> Interviewee 6: *"the PowerPoints are bright and colourful for them. I think the children loved the characters ."*

Two teachers made reference to how well researched the program was as a whole, explaining that they were able to deliver the resources in a more confident manner, knowing that they were based on psychological evidence.

> Interviewee 6: *"Connect seemed like it was obviously based on like, evidence, and then the proper psychological models as well."*

When teachers were asked what they enjoyed the most about the Connect program six out of seven teachers mentioned that the mindfulness activities were greatly beneficial and a strength of the program. One teacher in particular highlighted numerous times how useful the mindfulness activities were, and it seemed to be his main takeaway from the Connect curriculum.

> Interviewee 1: *"they really enjoyed the mindfulness. And said 'can we do it again?'"*

> Interviewee 1: *"I keep banging on about this mindfulness, but that's the bit I learnt the most from."*

In particular, many of the teachers expressed that mindfulness was a very useful tool to use at the beginning of a lesson to create a more relaxed atmosphere, allowing the pupils to get into the right headspace for learning.

> Interviewee 1: *"we can switch into mindfulness mode I call it, and you know we can just relax."*

> Interviewee 5: *"it definitely brought them down...if they'd had their playtime...they would come down and they'd be more relaxed"*

> Interviewee 2: *" it only took two, three, five minutes at most and you had a class who were ready to learn, and you know quite balanced."*

One of the teachers also went on to express that mindfulness was not only beneficial to her pupils, but also on a personal level, as it allowed her to check in with how she was feeling in the midst of a busy day of teaching.

> Interviewee 6: *"its just having that time just to kind of sit back and relax...just to concentrate on your own, on what is going on inside your mind as well."*

Application to the new Curriculum for Wales

In general, many of the teachers felt that Connect was compatible with daily life in their school, as the teachings of the program fit well with their school ethos and aligned well with their schools' core values already taught by the institutions.

> Interviewee 4*: "the values quite often link as well with assemblies...there is a natural thread with what we are talking about."*

When asked, 'how does connect fit with other health and well-being interventions or programs you have got running in the school at the moment?' Four out of seven agreed that Connect was able to naturally establish itself alongside interventions already in use at the time of the interviews, such as ELSA, A Quiet Place, and Five Ways to Wellbeing.

> Interviewee 4: *"the mindfulness is something that we are very keen in developing and it fits in well with...things like ELSA where the children can express themselves and chat."*

> Interviewee 7: *"So it really did just went hand in hand with it really. It was just ideal because they just knew about the five ways...because a lot of the warm ups in the Connect lessons...that sort of marries together with what we're doing with the five ways. So I think it just goes alongside it really well."*

Four out of seven of the teachers also expressed that they were impressed with the extent to which Connect covered the health and well-being area of learning experience within the Welsh Curriculum.

> Interviewee 2: *" in terms of the health and well-being curriculum, it fits in really really well with what I saw with that...its going to help them to learn across the curriculum."*

> Interviewee 2: *"with the new curriculum now, everything has got to be cross curricular...and I think if something naturally just weaves in and out of what's going on that its not just given an hour there and there... it's going to be easier as well, maybe, to keep it going for the rest of the time"*

> Interviewee 6: *"I think we are covering a lot of the health and well-being area of learning."*

> Interviewee 7: "*it's really good...because it's a new area the AoLE of health and well-being isn't it? And would fit with RSE and stuff like that as well."*

One of the teachers went onto explain that Connect acted as a 'springboard', that inspired the staff to incorporate different well-being practices into the culture of the school.

> Interviewee 2: *"across the school we have tried to develop from connect, really that was the springboard. The mindfulness scripts...I researched more of those and then we've implemented that through the school."*

Many of the teachers explained that the Connect teachings were able to permeate into other areas of learning outside of the dedicated health and well-being sessions, due to the easily generalizable nature of Connect. The cross curricular nature of Connect meant that each learning objective was reinforced throughout the week across different subjects.

> Interviewee 2: *"they're not just using it in health and well-being, their using it maybe in PE, they're using it in science...there are good opportunities there for bringing the themes of connect in across the curriculum."*

Six out of Seven teachers explained that the teachings of the Advisor in particular were helpful in different areas of teaching practice to guide pupils towards making the right choice. This was particularly relevant when managing instances of challenging behaviour or resolving conflict between pupils.

> Interviewee 2: *"I would think I've used a lot of the Advisor 'what would the advisor tell you to do?'"*
>
> Interviewee 2: *"'what would the noticer do in this situation? What would he notice?' You know, you can use that in so many lessons."*
>
> Interviewee 3: *"in the event of having to sit down with a child who is misbehaving, you know we can use connect... 'what made you do that? Didn't you think of the consequences?' you know, the Advisor."*

<u>Generalisation to areas outside of Connect lessons.</u>

One teacher went on to describe a situation in which she used the teachings of the Advisor to help a year 5 pupil who was suffering with anxiety surrounding coming into school in the morning. She explained that the student would get within sight of the school and become frozen with fear. He would try to delay entering the school grounds by waiting on a nearby bench whilst becoming increasingly overwhelmed, which often led to a panic attack and resulted in the student being late to school on a frequent basis. She explained that after scheduling some time to talk through the issue with her student, she was able to use the connect teachings, namely those of the Advisor, to help resolve the problem, making coming to school a safer and more calm experience.

> Interviewee 2: *"I'd say 'what would your advisor give you as advice?'...we've not overcome I would say the anxiety by far, but you see in school we've stopped sitting on the bench, we come to school now...its stopped like broken a pattern of behaviour."*

Five out of seven teachers were also able to provide real world examples, either of how they used the principles of Connect to guide pupils through challenging real-world experiences, or cases where pupils used the teachings of Connect of their own volition to guide their decision making. One teacher found that focusing on the Connect principle of Inner Strength was particularly useful for his pupils.

> Interviewee 1: *" 'I used my inner strength' they say that to me now, so that's really nice."*
>
> Interviewee 1: *" he had a judo competition, and he was worried...he came in after he'd done it and said 'I was using my inner strength'"*

Strengthening the relationship between teacher and pupil

Many of the teachers felt that Connect was able to help them better understand their pupils on an emotional level. The program enabled them to better get into the mindset of their pupils, so that they were able to better to understand their needs, and subsequently meet these needs.

> Interviewee 2*: "its made me very very aware of the needs of the pupils and that the needs have changed from pupils I taught maybe three years ago."*

> SE: *"it made me more aware of how children process things...how they can use that to channel their emotions and their responses so that they are appropriate to situations as well."*

This better understanding of pupils' emotional needs in turn led to a stronger teacher-pupil bond, which was reported by five out of seven teachers. Four out of seven teachers explained that Connect helped to establish a more open channel of communication between pupils and school staff. Before implementing Connect, teachers felt they had very few opportunities to talk to and get to know their pupils. However, during the Connect implementation period, many of the teachers were able to better relate to their pupils when they shared personal experiences with the class In turn, the pupils felt more comfortable being emotionally vulnerable with their teachers.

> Interviewee 2: *"We've spoken very little...they get very little attention but in the Connect lesson, I was able to learn things about individuals that otherwise I wouldn't know, things that they are worried about ...that for me as a teacher is very, very useful."*

> Interviewee 2: *"They talk about it now on a daily basis, anxieties and fears and worries, and how we are feeling."*

Two of the teachers explained that Connect had a significant impact on how they now engage with their pupils. One of the teachers explained that the program has helped them to more actively listen to their pupils' emotional needs and has helped fixed health and well-being as a priority throughout the school day, so that it is now the first thing she considers whenever an issue arises.

> Interviewee 2: *"im more aware of the way I treat them, im always thinking well-being first, and I think connect has helped put that focus on that."*
>
> Interviewee 2: *"I've definitely softened as a person I think, as a teacher in that is, the way I respond to children is different from how I used...I listen more and I think connect has helped do that."*
>
> Interviewee 2: *"It's given* (health and Well-being) *priority, it's given it its place, and then you don't forget about it. "*
>
> Interviewee 7: *"it changed the way I might react to them, yeah, or helped to give tools to the children and helped them to solve things."*

All of these changes culminated in a stronger bond between educators and their pupils that was centered around well-being and understanding. This shift in teacher-pupil dynamic was explicitly reported by two of the teachers.

> Interviewee 6: *"being able to share little bits of myself...I think it develops the relationships between us as like a class teacher and class"*
>
> Interviewee 3: *"its getting to know the children as people, instead of as academics"*

**2.2 Challenges during implementation**

Difficult Content

A challenge reported by all of the teachers interviewed related to the content level of the Connect lessons being too difficult for their pupils to comprehend. Many of the teachers discussed the fact that some of the Connect concepts, such as the Noticer, Advisor, and Discoverer, were too advanced for some of the younger children to wrap their heads around. Others struggled with the language and written aspect of Connect, with some teachers suggesting that the program was simply too mature for their class.

> Interviewee 1: *"But Discoverer, Advisor? I don't think they would understand that to be honest…you'd have to really pitch it low."*
>
> Interviewee 5: *"they didn't understand it, the words were too hard. So definitely in terms of language, far above their heads."*

Interviewee 7: *"the values, It's quite an abstract concept for them"*

Interviewee 7: *"I think they weren't mature enough really"*

The difficulty faced by some of the pupils when engaging with Connect led to four of the class teachers adapting the Connect lesson plans to suit the needs of their pupils.

Interviewee 5: *"I had to put my own spin on it because the words were far too hard."*

Interviewee 6: *" I think my only difficulty was, trying to adapt it maybe a little bit for the younger years."*

Interviewee 1: *"obviously im not doing that one sheet for all of my children....they would find that way too much of a challenge so im having to create something else from it."*

It also led to three of the seven teachers accessing Connect content for their classes that was aimed at a younger year group, as this was much easier for their pupils to get to grips with.

Interviewee 7: *"I did a lot of the year 2 work with the year 3s, I thought the language was easier for them to understand."*

Interviewee 4: *"the teachers in the foundation phase felt that it was a little bit hard, so they were going to the year below."*

Interviewee 5: *" it was too hard...other schools in the area, in year three, had gone down to year two."*

Many of the teachers did feel however that some of their children were able to cope with the Connect lesson content, and that those who struggled the most were lower ability pupils.

Interviewee 6: *"the class last year were... they weren't as capable, it was a bit of a class of two halves, half of them were capable, and the other half really, really struggled. "*

This led to two of the seven teachers suggesting that the Connect resources be split so that they could cater to different abilities. Lessons and activities could contain basic content for lower ability pupils who needed simpler language and concepts, as well as more advanced content for those pupils who would be able to cope with more abstract concepts and complex language.

> Interviewee 1: *"there's no differentiation, its one sheet."*
>
> Interviewee 1: *"Yeah they don't cater.. .you could have a lower ability, middle ability, higher ability sheet."*
>
> Interviewee 2: *"maybe a differentiated worksheet would be useful for them, a* (lower ability) *pupil's sheet with less writing"*

However, it is important to note that four out of seven teachers suggested that at least some of this difficulty was due to the pupils simply not being used to the connect materials. Due to the short implementation period, some of the teachers felt that the pupils had not had chance to get to grips with the language and concepts of Connect, and that If the program had been more well established, perhaps the pupils wouldn't have found the lessons so difficult.

> Interviewee 1: *"the DNA-V, that was quite tricky to get their heads around, but once we started getting into it.. .the children were fine."*
>
> Interviewee 6: *" it just, it will just take a little bit of time to kind of get your head around"*
>
> Interviewee 7: *"I think if we roll this out throughout the school, by the time they get to that particular new group, they will know all the vocabulary, you know, all the words and the terms and stuff"*

Time Constraints

Another challenge discussed by the majority of teachers was the issue of timing. Five out of seven teachers struggled to fit all of the lesson content into an hour Connect session. This often led to both teachers and pupils feeling rushed as they tried to finish tasks and activities in the allotted health and well-being sessions.

Interviewee 6: *"fitting everything in is a bit of a difficulty sometimes"*

Interviewee 3: *"Challenges? Erm, time I suppose"*

Interviewee 2: *"I did find myself as well having to rush and try and move the pupils on through lessons. A bit too much. I'd say little bit less content."*

Interviewee 7: *"towards the end of the summer term, we've got a bit frantic really because we didn't quite manage to fit it all in"*

Four out of seven teachers felt that these timing issues were largely due to the fact that the Connect lesson plans simply contained too much information. Two of these teachers felt that if the content heavy Connect lessons were able to be cut down, so that there was less information to get through, but the teachings were still impactful, timing may not be such an issue.

Interviewee 1: *"I know everything is there but there is a lot of information to sift through"*

Interviewee 2: *"It was supposed to be an hour, but I don't think you'd finish all of it in an hour.. .maybe cut down a little bit on the content."*

Interviewee 7: *"Lots of information, you just need to sit down and read it from the beginning to the very end to make sure you know exactly what it is."*

Usability

Despite the majority of teachers finding the Connect resources easy to find and the website easy to navigate, some of the teachers had difficulty accessing elements of the Connect lessons. Three out of seven teachers explained that at time they had trouble finding all of the materials needed for the lessons, and that this process could have been made easier.

Interviewee 2: *"some of the clips you had to go into the website to find them and I sort of struggled."*

Interviewee 3: *"they were sometimes a bit clunky and hard to use.. .we found*

*it difficult to sometimes get the PowerPoint to actually play the video, so sometimes we had to ask for technical help"*

Interviewee 5: *"Everything wasn't on one click of the mouse , you had to click, here click there, click somewhere else and go looking for it.. .for me it was a bit fiddly, I would have liked it more straightforward."*

Interviewee 5: *"It just, it could be made easier, because, you know you've got a class of forty waiting.. .it could be a little bit easier, it would make me want to do it more."*

Two teachers did suggest however that these issues with accessibility and usability may have been due to technical issues rather than issues with the Connect program itself. In order to avoid this possibility, one of the teachers suggested ensuring all resources were accessible prior to the lesson.

Interviewee 6: *" I don't know if that's just my computer or if it is the PowerPoint"*

Interviewee 7: *"our internet's been a bit sketchy. So I think its up to the class teacher, just to make sure you've got the link."*

**2.3 Overcoming initial concerns.**

Despite their initial concerns, in all instances the teachers explained that many of their initial concerns were quickly subsided when they began to implement the Connect sessions. One teacher explained that she was glad that her initial concerns about time constraints didn't prevent her from continuing with the connect sessions, as they ended up being an incredibly valuable part of her teaching practice for that academic year.

Interviewee 2: *"I did sign up for it. And I'm so glad I have because sometimes your workload keeps you back from doing things you really, really want to do."*

Interviewee 2*: "I think the extras I've done this year, most of them have been really worthwhile and connect is one of those."*

Two of the teachers went on to express that although they held preconceived ideas about what the Connect program would entail, which led to some apprehension, they were grateful that they gave the program a chance.

> Interviewee 6: *"I'm just grateful that we are doing it really!"*

Concerns about the mindfulness element also subsided upon uptake with teachers expressing an eagerness to continue with the practice due to the relaxation benefits reaped.

> Interviewee 1: "*I'm not into all that, but I actually felt like quite relaxed when I'd done it.*"

## **3.** Perception / opinions towards Connect training

### 3.1 Benefits

Three out of seven teachers found the Connect training they received to be very useful and enjoyable. One of the teachers enjoyed the fact that on leaving the training course they felt confident in the program and in their ability to implement Connect, as the training had been so thorough. She explained that the fact that the program had instilled confidence in her to support her pupils' health and well-being was a rarity, and that previous lack of training with other programs left her feeling underprepared. Another teacher really enjoyed learning about the theory underpinning the Connect program.

> Interviewee 2: *"I was very happy and I felt leaving that I'd had the time to be introduced to it properly and I could do it."*
>
> Interviewee 2: *"I did feel 'I'm okay I can do this now .' Very often with things we're landed with them, and we don't get that training and that training I think is so, so important."*
>
> Interviewee 6: *"I really liked knowing you know, the process of it and the theory behind it."*

## **4.** Perception / opinions towards Connect Support

### 4.1 Easily accessible support

Five out of the seven teachers who were interviewed received additional support from a research officer, Dr Jane Pegram, when implementing Connect with their class. Three out of five found that the support they received throughout the implementation of the intervention from the support officer was very reassuring. The teachers found that if they had any questions or doubts, it was made clear to them who they could contact, and when any queries arose, response came very quickly, which was very beneficial to the staff.

> Interviewee 1: *"it's nice to know you've got someone in the background if you need it."*
>
> Interviewee 2: *" we knew we could put it in an email if there was a problem. And the responses were, you know, next day at least if not same day and any question that you had was sorted straight away*."
>
> Interviewee 7: *"you know who to contact if we had any questions or wanted to know more, and that was particularly useful."*
>
> Interviewee 6: *"everybody just seems to be kind of at the end of an email as well, or at the end of the phone call."*

### 4.2 Visits from research officer not necessary

Although many of the teachers felt that the Connect support service available was a reassuring element to the program, three felt the that in person support sessions were unnecessary due to how easy the program was to implement. Support may be useful in future if they were implementing Connect with a class that were harder to engage.

> Interviewee 1: *"if I need something I could just email someone couldn't I?"*
>
> Interviewee 3: *" we would have said 'oh, you know, these children aren't engaging, because we've got a difficult class coming up to year five'...But it was just going so well."*

Interviewee 4: *"We always felt that we hadn't got a lot to give back, because it was going so smoothly, that we weren't having any difficulties."*

## 5. Proposed suggestions for improvement

### 5.1 Pupil voice

In terms of how to improve the Connect health and well-being intervention, two of the teachers suggested taking pupil feedback into consideration. Both teachers liked the idea of trialling student questionnaires to assess how much the pupils were enjoying and engaging with Connect.

Interviewee 2: *"Maybe I'd like a pupil feedback at the end of each unit...so that we can see as well, you know what we as teachers need to do."*

Interviewee 3: *" we know how much they are enjoying it at the moment, it would be interesting to do a little private questionnaire to see if they enjoy it as much in the next class."*

### 5.2. School-home link

Three out of seven teachers also felt that the Connect intervention could be improved if there was a way to involve parents and carers in the well-being process. One of the teachers explained that many of the parents were keen to know more about the Connect program and wanted to get involved, however, as there is no home-school link in the intervention, there was no way for them to do this. Another teacher explained how beneficial it would be to involve parents and carers, as this way the teachings of connect could be further reinforced at home.

Interviewee 3: *" just wondering where there's a link between school and home?...is something they can try at home with their mum and dad?"*

Interviewee 4: *"parents were very keen to hear about it...it would have been nice for them if, from the beginning, they were involved and could carry something on at home."*

Interviewee 6: *"A parent's guide to Connect would be really useful...that way their parents can consolidate what they are learning."*

## 6. Connect legacy following the trial

### 6.1 The need for Connect

Many of the teachers, both prior to signing up to the trial and after implementing the intervention, recognised the need for a comprehensive health and well-being program, now more than ever. Two teachers pointed to the importance of having a health and well-being program in place that wasn't just a 'quick fix', but that worked longitudinally to arm children with the tools and skills needed to build resilience and healthy habits.

> Interviewee 6: *" it was just a bit of ad hoc here and there...we wanted something fully embedded."*
>
> Interviewee 7*: " that's what we need to get the kids armed and ready and give them the tools...because it's not just overnight, it's to build on it, you're going to have to build on it, and build on it, so yeah. Really good."*

Another teacher recognised the importance of a health and well-being program like Connect, in light of COVID-19. She explained that she expects pupils will experience long term consequences from the pandemic, and that it is vital that we support pupils by equipping them will the skills to cope. She also stated that Connect was able to help identify pupils who are in need of additional support, and to assess if their wellbeing is improving over time.

> Interviewee 2: *"I saw a need for it more so this year than ever..this sort of programme is going to continue for years to come. I think there is going to be a long-term effect of what these pupils have been through."*
>
> Interviewee 2: *j"ust that helps us put support into place if we know where they're at, and also to feel if the picture is improving, connect helped with that over the long term."*

## 6.2 Continued Connect use and suggestions for improvement

Desire for longer implementation period

All seven teachers who were interviewed stated that they enjoyed the Connect program, and that they would like to continue using it within their institution in future.

interviewee 1: "*Yeah, I think the children have really enjoyed it, so yeah, hoping it continues."*

Interviewee 2: "*it is something I want to continue with definitely."*

When asked, 6 out of 7 teachers also stated that they would like to see Connect embedded throughout the whole school.

Interviewee 1: "*We're looking into doing it across the whole school now."*

Interviewee 2: "*I think if you've got a whole school program erm, you know it's easier to get those developed skills."*

However, four of the teachers felt that the six weeks in which they implemented Connect during the trial was too short, and that they would have liked a longer implementation period to allow any impacts from the Connect health and well-being program to fully emerge.

Interviewee 2: *"I haven't even finished both units. I've done one and a half I think of this...I feel that held us back a little bit."*

Interviewee 5: *"I think just with how much we did which was six weeks? I don't think that would have been enough really no."*

Interviewee 7: *"I think to see a proper impact, you'd need to carry on with it straightaway...and to continue to use that vocabulary."*

The same four teachers felt however that if Connect was to be adopted on a whole school basis, and was allowed at least a full academic year to embed itself properly, then they would be able to make better judgements about how Connect has had an impact on their pupils.

Interviewee 2: *"You know, start in September and finish in the summer to make a fair judgment to be honest."*

Interviewee 6: *"im hoping, as we properly implement it, we will see kind of those results, obviously because it is still quite new, you know we can't quite measure it yet"*

Interviewee 7: *"when we start this through school then it will have more of an impact for all of the children then wont it?"*

Time of year

Two of the teachers interviewed identified elements of the Connect training that posed some challenges. One teacher explained the timing of the training sessions was a problem as the dates for the training coincided with the first week of the autumn term. This meant that not all of the staff could be released at the same time for training during such a busy period, which was a problem for the school who wanted to implement Connect across all year groups.

Interviewee 3: *"I originally started the email believing it would be a staff training after school, but I think it's a whole days training. The timing is wrong for us."*

Interviewee 3: *"I couldn't release all the teachers for that."*

Training interface

Another teacher felt that the Connect training would have been more helpful if it had gone into more detail about how to manage the program's interface in a step-by-step manner. She also felt that the training could have been more helpful if it was held in person rather than virtually.

Interviewee 5: *"Could do with more looking at the program, 'right you start here', I know that its a bit step by step, but you needed it because there were so many jumps."*

Interviewee 5: "*over teams, nothing helps does it*? *Over the computer."*

Connect link to progression steps

Finally, although the majority of teachers interviewed agreed that they were impressed with the extent to which the Connect program covers the targets set out in the Health and well-being area of learning and experience, two of the seven teachers stated that they would have liked to have seen more explicitly how each connect lesson links to the 'What matters' statements under the new curriculum for Wales.

> Interviewee 2: "*if it was going to be adapted to weave in and out of the areas of learning id be even more inclined* (to continue using Connect)*."*
>
> Interviewee 6: *"So that would be like one feedback for like Connect as a company to like, link it to like our progression steps and the 'what matters' and things like that."*

## Discussion

Thematic content analysis of seven semi-structured interviews with teachers' across North Wales revealed six main themes that encapsulated the views, perceptions and experiences of teachers delivering the Connect curriculum to KS2 children in primary school. The six themes were as follows; preconceptions/initial feelings about Connect, perceptions/opinions towards the Connect curriculum, perceptions/opinions towards Connect training, perceptions/opinions towards Connect support, proposed suggestions for improvement and Connect legacy following the trial. Each of these themes were broken down into a number of subthemes.

One of the most significant findings from the interviews was the subtheme of resources and lessons, under the benefits of the Connect curriculum theme. It was found that an overwhelming majority of teachers made comments about how useful it was to have a pre-planned curriculum that was at their fingertips and ready to use. This meant that those already balancing busy teaching schedules, along with additional school-based and extra-curricular responsibilities, were not required to exhaust additional time and energy when researching, compiling and planning how to deliver health and well-being content. This is an especially important finding when we consider that in the current education climate, teachers are increasingly facing burnout (Pressley, 2021), due to factors such as large class sizes, an overwhelming workload,

and lack of support from colleagues (Saloviita & Pakarinen, 2021). Burnout amongst educators is associated not only with poor teacher mental wellbeing (Schonfeld & Bianchi, 2016), but it can also have a significant impact on pupil academic attainment (Herman, Hickmon-Rosa & Reinke, 2018) and motivation (Madigan & Kim, 2021). As health and well-being is such an essential component of the new curriculum for Wales (Welsh Government, 2021), it is vital that health and well-being education is comprehensive, well planned and thorough. Such planning would take a significant amount of time for a class teacher, thus adding to an already heavy workload and increasing the risk of burnout. In addition, Hughes and Lewis (2020) highlight how teachers in Wales are concerned about their ability to deliver health and Well-being education when they are faced with a lack of guidance. However, as Connect is a pre-planned easy to use curriculum, the program reduces the pressures faced by teachers to further stretch themselves to plan for an area of the curriculum they may be unfamiliar with.

The majority of teachers also expressed that the Connect materials were easy to use and that the Connect website was easy to navigate. Most teachers had no problem locating resources and lesson plans within the website, which meant that no time was wasted searching for the materials as they were right in front of them. Such findings are similar to those of Kelly and Longbottom (2004), who conducted interviews with teachers to investigate their experiences using the PATHS well-being curriculum, and reported that teachers found the program easy to use and that it was highly engaging. PATHS has a substantial body of evidence in support of its effectiveness, and despite some mixed results, the program has been found to improve children's emotional competencies (Domitrovich, Cortes & Greenberg, 2007), interpersonal skills and empathy (Curtis & Norgate, 2007). It may therefore be that when a program is easy to use it is better able to produce desired effects in terms of child health and well-being. Indeed, it has been found that when educators are more confident about the lesson content they are delivering, their pupils are more likely to gain something from that lesson and demonstrate greater academic attainment (Ross, 1992). Therefore, the fact that many teachers found Connect to be simple and easy to use likely means it is able to be delivered with greater confidence and thus, may have a greater impact on pupil health and well-being.

Many of the teachers also expressed how enjoyable the Connect program was, stating that content was engaging for the pupils and that the resources were bright, colourful and fun. In particular, staff found that characterisation of the DNA-V model (Ciarrochi & Hayes, 2005) components to be very effective, as children were able to relate to and accept the characters easily as friends who would help them to contextualise and understand their emotions. This is similar to the findings of both Kelly et al. (2004) and Stallard et al. (2005) who conducted qualitative research to investigate the PATHS and FRIENDS programs respectively. Pupils found both curricula to be highly engaging and enjoyable, with both investigations having a positive impact on pupils' emotional competencies, and anxiety and self-esteem respectively. The positive nature of this subtheme is further highlighted by the fact that in their review of factors related to successful intervention implementation, Robson et al. (2019) found that effective interventions tended to be enjoyable, and captured the attention of both staff and pupils. However, the findings of the present study are in contrast with the qualitative arm of Connolly et al.'s (2018) investigation of the Roots of empathy program, where staff reported that the program lacked an element of fun, creativity and originality. Interestingly, the quantitative arm of the investigation found that the program had no significant impact on children's empathy or interpersonal skills, speaking to the importance of implementing a program that is engaging and relatable for pupils.

Almost all of the teachers when talking about the Connect resources mentioned how much the mindfulness activities were enjoyed by both staff and pupils. Many of the teachers praised how well the mindfulness sessions were able to create a calm and relaxed classroom environment, which allowed the pupils to ready their minds for learning. For some of the teachers, mindfulness was also beneficial on a personal level, as it allowed them to take a moment to breathe and ground themselves amidst a busy school day. Although neither programs directly employed the use of mindfulness, investigations of both the Incredible Years (Hutchings et al., 2004) and SEAL (Banerjee et al., 2014) were found to have a positive impact on challenging behaviour and school culture respectively. Interviews with school staff revealed that many teachers felt such impacts were due to the intervention's ability to create a calm and friendly school environment and due to improvements in the well-being of pupils and staff alike, in line with the findings of this TCA. It has been demonstrated that when teachers experience high levels of well-being, their pupils are more likely to perform well academically

(Roffey, 2012) and experience lower levels of psychological distress (Harding et al., 2019). Therefore the finding that Connect is able to exert a positive impact on staff as well as pupils, through the use of mindfulness, may further compound the effectiveness of the program. The findings also support the literature surrounding the benefits of mindfulness use, where it has been found to reduce anxiety, improve low mood and increase self-worth (Biegel, Brown, Shapiro & Schubert, 2009; Reangsing, Punsuwup & Schneider, 2021). Taken together, the findings of the current study support the outcomes in the literature, and suggest that using mindfulness as a tool to promote mental well-being at a student and educator level can have a positive impact in a number of ways.

Within the theme of benefits of the Connect curriculum, the subtheme of Connect Application was also a significant topic which educators were able to delve into. Many teachers praised the fact that Connect could be easily applied throughout the school day and across all areas of learning. This not only ensured that the teachings and messages of Connect were reinforced many times throughout the week to consolidate learning, but that any issues or challenges that arose in lessons and activities outside of a dedicated PSHE session could be approached from a health and well-being stance through the use of the Advisor, Noticer and Discoverer. This finding in line with the research of Hughes and Lewis (2020), who found that when teachers in Wales delivered a mindfulness program, it was successfully able to be applied to other areas of the curriculum such as Maths and Science. This appraisal of Connect as able to permeate into other areas of the curriculum is a positive finding that draws attention to fact that Connect is able to meet another requirement of the Welsh curriculum, that of flexible and cross-curricula learning. The Welsh Government states that learning across its six areas of learning and experience should be cross-curricula and integrated, and educators are urged to form meaningful links across subjects (Welsh Government, 2020). Therefore the present research has highlighted that Connect is a pre-planned curriculum that is primed for use across the curriculum to support educators in the delivery of flexible health and well-being content.

Within the subtheme of Connect Application, almost all of the teachers discussed the importance of the Advisor, with many explaining that the character was useful to guide children towards making the right choice, especially during instances of conflict

and challenging behaviour. One teacher also explained that the Advisor was a particularly useful tool that she used consistently to help a pupil overcome school related anxiety. Such findings are in line with other qualitative investigations of established health and well-being programs used throughout the UK, such as Curtis and Norgate (2007) who found that PATHS was able to help develop children's emotional development, problem solving and empathy, and Hutchings et al. (2004) who found that the incredible years was able to support children's emotional intelligence, confidence and communication. This is a very positive result when we consider the findings of Long, Hawkins, Murphy and Moore (2021) whose qualitative interviews with teachers in Wales demonstrated that many educators felt that due to the attainment focused previous curriculum, students currently lack vital communication and socio-emotional skills, and highlight how Connect may be a viable curriculum through which such skills can be nurtured. It is also supportive of Hayes and Ciarrochi' s (2015) research, which states that the character of the Advisor is well received by children, who find it simple to understand, and quickly adopt the Advisor's vocabulary into their everyday language. The findings of this qualitative investigation are also in line with evidence that the science underlying many of the techniques employed by the Advisor are effective when overcoming upsetting thoughts (Larsson, Hooper, Osborne, Bennett & McHugh, 2016) and when battling stress and depression (Bramwell & Richardson, 2018). This research has therefore highlighted the value of the Advisor as a crucial component of Connect, one which can be used by educators to support their student's emotional and social development.

A further important subtheme highlighted by teaching staff was the strengthening of the relationship between pupils and teachers. Many felt that Connect better enabled them to understand their pupils emotional needs, which led to greater communication, honesty and trust between pupils and educators. This finding is in line with those of the qualitative arm of Hallam's (2009) investigation of SEAL. Interviews with school staff revealed that the health and well-being intervention helped educators to put themselves in their pupils shoes, to better understand and relate to their emotional experiences. Furthermore, the qualitative interviews with teachers in Wales conducted by Long et al. (2021) highlight how educators feel that their role is changing with the curriculum reforms, so that the Well-being of the child is at the centre of their teaching approach, rather than the progress of

the child being at the centre. This highlights even further how Connect is able to meet another target of the Welsh curriculum, that of cementing health and Well-being at the heart of all learning. This finding is also in line with a wealth of literature demonstrating that a closer educator-pupil bond is associated with greater cognitive development, school performance and mental and emotional well-being (Lin, Fabris & Longobardi, 2022; Wang, Degol, Amemiya, Parr & Guo, 2020). In recent years, both the changes introduced by the new curriculum for Wales (Welsh Government, 2020), and the fallout resulting from the COVID-19 pandemic (Singh et al., 2020), has meant that pupils emotional needs have altered. Many primary aged pupils are now experiencing greater levels of anxiety, stress and depression since the lifting of national lockdown periods (Nearchou, Flinn, Niland, Subramaniam & Hennessy, 2020), and as a result educators are now being asked to support these pupils through the delivery of health and well-being education. Evans (2022) discussed the changing role of teachers since the introduction of the new Welsh curriculum, and states that as teachers are now required to be flexible in their teaching approach, whilst being responsible for delivering health and well-being education to young pupils, they are undergoing a process known as ‘reprofessionalisation’ as coined by Noordegraaf (2007). Although this shift in responsibilities and expectations faced by teachers was framed as a burden by Evans (2022), the data from the qualitative interviews suggests that if this increased responsibility can promote a more positive dynamic between educators and pupils then it may result in increases in health and well-being for young learners. It is also in line with the guidance published in the Welsh Government’s (2021) Whole-school approach to emotional health and well-being document, which encourages educators to strengthen their relationships with their pupils through the health and well-being content they deliver. The qualitative interviews conducted have highlighted that Connect is able to nurture this bond, and so further compounds the viable nature of the program for teachers in Wales.

A final important subtheme identified from the interviews was that of difficult content, under the theme of challenges of the Connect curriculum. All of the teachers discussed that the content level of Connect was too difficult for their children, particularly younger learners and those who were lower ability. Many discussed that the language used and the concepts of the Discoverer, Advisor and Noticer were too advanced or abstract for their pupils, leading to many of the teachers delivering content to their

students that was designed for a younger cohort. Other teachers suggested that the Connect resources be differentiated to cater to differing abilities. These findings are similar to those found by Attwood et al. (2012), who conducted qualitative interviews with staff and pupils, and found that some of the younger pupils felt that the components of the CBT based intervention were too difficult to grasp. Both ACT and CBT are complex psychological therapies which are grounded in science. It is therefore unsurprising that interventions based on such vast therapies that were originally designed for use with adult clinical populations contain concepts that are simply beyond the understanding of 4–11-year-olds. However, this finding is concerning, as there is evidence to suggest that lower ability pupils are at a greater risk of experiencing poor mental and physical well-being (Buchanan, Hargreaves & Quick, 2021; Buchanan, Hargreaves & Quick, 2022; Clark & Teravainen-Goff, 2018), meaning that those struggling the most with the Connect content are the ones most in need of health and well-being support. This would suggest that Connect content must be modified so that the concepts are easier to understand for struggling pupils and so that the language surrounding the DNA-V model employs simpler terms that are accessible to children. However, it is important to note that the majority of teachers felt that the difficulties pupils experienced with the Connect content may be due to a lack of experience with the program, and that once the intervention had been embedded across the school and in place for a number of years, then this difficultly may disappear.

### Strengths, limitations and implications for future research

This TCA investigation has a number of strengths. Firstly, the researcher set out to investigate the thoughts, opinions and views of teachers who had experience delivering the Connect program to KS2 pupils, thus directly involving them in the research process. It has been demonstrated that the literature surrounding investigations of school-based interventions is often inaccessible to educators, due to a number of barriers (Hemsley-Brown & Sharp, 2003). This has led to teaching staff often making decisions about the type of content they deliver to their pupils based on the word and experience of their colleagues and others in the profession (Greany & Brown, 2017). As this investigation contains detailed first-hand accounts of teaching professionals direct experiences of Connect, it may be more likely to influence

educator's decisions about health and well-being content than recommendations by practitioners, psychologists and researchers. Furthermore, as qualitative research is often poorly conducted (Braun & Clarke, 2006), due to a lack of clear guidance about how reliability can be established, the researcher chose to follow the methods of Nowell et al. (2017), in order to establish trustworthiness. This was achieved by establishing credibility, through prolonged engagement with the data, transferability, dependability, through the use of an audit trail in the form of a reflexive journal, and confirmability. Furthermore, ICR was undertaken by an additional researcher, to further establish trustworthiness. As the ICR score was very high, it signifies that the TCA process was transparent and reliable (O'Connor & Joffe, 2020).

However, the investigation also has a number of limitations, the first of which was the small sample size. Only seven participants were recruited to take part in the investigation, largely due to the fact that recruitment occurred during the busy summer school term, meaning many teaching staff simply did not have the time to take part in the research process. Although there are no explicit guidelines stating the minimum number of interviews required to conduct TCA, in order to code the data in a meaningful way, it has been demonstrated that between 9-17 interviews are required when conducting qualitative research (Hennink & Kaiser, 2022). Further, it was originally intended that the TCA process would compare two groups of educators, those who had received implementation support whilst delivering Connect, and those who had not, as detailed in Nisar et al.'s (2023) study, to provide further detail about the benefits of additional support from a research officer. However, due to the low level of recruitment, only two of the teachers received implementation support, rendering the comparison unfeasible. Finally, due to the virtual nature of the interviews, technical difficulties and loss of signal meant that some of the qualitative data was lost or inaudible when it came to the process of transcription, meaning the final dataset was not as rich as it could have been.

Future research should seek to build on the present investigation by conducting qualitative analyses of Connect with a larger sample of teachers in order to ensure that the transcribed data can be conducted in a meaningful way. A larger sample would also allow a qualitative comparison to be drawn between educators who received additional implementation support, and those who did not, in order to assess the value of visits

from the research officer, and determine the extent to which this has an impact on the outcomes of the program. Future research should also utilise the findings of this TCA to tailor the Connect content to better suit the needs of both pupils and educators in Wales. The most significant challenge when it came to implementing Connect was the difficult content, language and concepts that proved too advance for younger and lower ability pupils. Researchers should investigate the value of incorporating differentiated worksheets into the program, that could cater to all learning abilities, so that the program is accessible to all.

## Conclusion

In conclusion, Thematic Content Analysis of semi-structured interviews with teachers across North Wales who had experience delivering the Connect program revealed that the pre-planned nature of the health and well-being intervention means that it is useful, practical and easy to navigate. The two elements of the program that were discussed most positively were the mindfulness sessions and the characters of the DNA-V. The mindfulness sessions were beneficial to both pupils and staff, as they promoted a calm and relaxing learning headspace. The DNA-V characters, in particular the Advisor, were relatable, enjoyable and engaging for the children and were able to be utilised in all areas of school life to resolve conflict and promote understanding. The program also promoted the creation of a stronger teacher-pupil bond, which better allowed educators to understand their pupil’s emotional states. However, all educators brought up the fact that the Connect content was simply too challenging for younger and lower ability learners, due to the complex language and abstract concepts at the heart of the intervention.

**References**

Attwood, M., Meadows, S., Stallard, P., & Richardson, T. (2012). Universal and targeted computerised cognitive behavioural therapy (Think, Feel, Do) for emotional health in schools: results from two exploratory studies. *Child and Adolescent Mental Health*, *17*(3), 173-178.

Banerjee, R., Weare, K., & Farr, W. (2014). Working with 'Social and Emotional Aspects of Learning'(SEAL): Associations with school ethos, pupil social experiences, attendance, and attainment. *British educational research journal*, *40*(4), 718-742

Biegel, G.M., Brown, K.W., Shapiro, S.L. and Schubert, C.M., 2009. Mindfulness-based stress reduction for the treatment of adolescent psychiatric outpatients: A randomized clinical trial. *Journal of consulting and clinical psychology*, *77*(5), p.855.

Bramwell, K., & Richardson, T. (2018). Improvements in depression and mental health after acceptance and commitment therapy are related to changes in defusion and values-based action. *Journal of contemporary psychotherapy*, *48*, 9-14.

Braun, V. and Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), pp.77-101.

Bree, R.T. and Gallagher, G., 2016. Using Microsoft Excel to code and thematically analyse qualitative data: a simple, cost-effective approach. *All Ireland Journal of Higher Education*, *8*(2).

Buchanan, D., Hargreaves, E., & Quick, L. (2021). 'My life is like a massive jigsaw with pieces missing'. How 'lower-attaining'children experience school in terms of their well-being. *Education 3-13*, *49*(8), 1000-1012.

Buchanan, D., Hargreaves, E., & Quick, L. (2022). Schools closed during the pandemic: revelations about the well-being of 'lower-attaining'primary-school children. *Education 3-13*, 1-14.

Clark, C., & Teravainen-Goff, A. (2018). Mental Well-being, Reading and Writing: How Children and Young People's Mental Well-being Is Related to Their Reading and Writing Experiences. National Literacy Trust Research Report. *National Literacy Trust*.

Connect PSHE (2021). *Our story*. Retrieved from Connect PSHE (connect-pshe.org)

Connolly, P., Miller, S., Kee, F., Sloan, S., Gildea, A., McIntosh, E., & Bland, J. M. (2018). A cluster randomised controlled trial and evaluation and cost-effectiveness analysis of the Roots of Empathy schools-based programme for improving social and emotional well-being outcomes among 8-to 9-year-olds in Northern Ireland. *Public Health Research*.

Curtis, C., & Norgate, R. (2007). An evaluation of the promoting alternative thinking strategies curriculum at key stage 1. *Educational Psychology in practice*, *23*(1), 33-44.

DeSantis, L., & Ugarriza, D. N. (2000). The concept of theme as used in qualitative nursing research. *Western journal of nursing research*, *22*(3), 351-372.

Domitrovich, C. E., Cortes, R. C., & Greenberg, M. T. (2007). Improving young children's social and emotional competence: A randomized trial of the preschool "PATHS" curriculum. *The Journal of primary prevention*, *28*, 67-91.

Elharake, J. A., Akbar, F., Malik, A. A., Gilliam, W., & Omer, S. B. (2022). Mental health impact of COVID-19 among children and college pupils: A rapid review. *Child Psychiatry & Human Development*, 1-13.

Evans, G. (2022). Back to the future? Reflections on three phases of education policy reform in Wales and their implications for teachers. *Journal of educational change*, *23*(3), 371-396.

Flemming, K., & Noyes, J. (2021). Qualitative evidence synthesis: where are we at?. *International Journal of Qualitative Methods*, *20*, 1609406921993276.

Greany, T., & Brown, C. (2017). The Evidence Informed School System in England: Where Should School Leaders Be Focusing Their Efforts?. *International Journal of Education Policy and Leadership*, *12*(3), n3.

Hallam, S. (2009). An evaluation of the Social and Emotional Aspects of Learning (SEAL) programme: promoting positive behaviour, effective learning and well-being in primary school children. *Oxford Review of Education*, *35*(3), 313-330.

Harding, S., Morris, R., Gunnell, D., Ford, T., Hollingworth, W., Tilling, K., ... & Kidger, J. (2019). Is teachers' mental health and Well-being associated with students' mental health and Well-being?. *Journal of affective disorders*, *242*, 180-187.

Hayes, L. L., & Ciarrochi, J. V. (2015). *The thriving adolescent: Using acceptance and commitment therapy and positive psychology to help teens manage emotions, ach*

Hemsley-Brown, J., & Sharp, C. (2003). The use of research to improve professional practice: A rapid review of the literature. *Oxford review of education*, *29*(4), 449-471.

Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A rapid review of empirical tests. *Social science & medicine*, *292*, 114523.

Herman, K. C., Hickmon-Rosa, J. E., & Reinke, W. M. (2018). Empirically derived profiles of teacher stress, burnout, self-efficacy, and coping and associated student outcomes. *Journal of Positive Behavior Interventions*, *20*(2), 90-100.

Hughes, S., & Lewis, H. (2020). Tensions in current curriculum reform and the development of teachers' professional autonomy. *The curriculum journal*, *31*(2), 290-302.

Humphrey, N., Barlow, A., Wigelsworth, M., Lendrum, A., Pert, K., Joyce, C., ... & Turner, A. (2016). A cluster randomized controlled trial of the Promoting Alternative Thinking Strategies (PATHS) curriculum. *Journal of school psychology*, *58*, 73-89.

Hutchings, J., Daley, D., Jones, K., Martin, P., Bywater, T., & Gwyn, R. (2007). Early results from developing and researching the Webster-Stratton incredible years teacher classroom management training programme in North West Wales. *Journal of Children's Services*.

Hutchings, J., Lane, E., Owen, R. E., & Gwyn, R. (2004). The introduction of the Webster-Stratton classroom dinosaur school programme in Gwynedd, North Wales: A pilot study. *Educational and Child Psychology*, *21*(4), 4-15.

Kelly*, B., Longbottom, J., Potts, F., & Williamson, J. (2004). Applying emotional intelligence: Exploring the promoting alternative thinking strategies curriculum. *Educational Psychology in Practice*, *20*(3), 221-240.

Larsson, A., Hooper, N., Osborne, L. A., Bennett, P., & McHugh, L. (2016). Using brief cognitive restructuring and cognitive defusion techniques to cope with negative thoughts. *Behavior modification*, *40*(3), 452-482.

Lin, S., Fabris, M. A., & Longobardi, C. (2022). Closeness in student–teacher relationships and pupils' psychological well-being: The mediating role of hope. *Journal of Emotional and Behavioral Disorders*, *30*(1), 44-53.

Lincoln, Y. S., & Guba, E. G. (1985). Naturalistic inquiry. Newberry Park. DeSantis, L., & Ugarriza, D. (2000). The concept of theme as used in qualitative nursing research. Western Journal of Nursing Research, 22, 351–372. doi:10.1177/019394590002200308

Long, S. J., Hawkins, J., Murphy, S., & Moore, G. (2023). School health and Well-being and national education system reform: A qualitative study. *British Educational Research Journal*.

Mackenzie, K., & Williams, C. (2018). Universal, school-based interventions to promote mental and emotional well-being: What is being done in the UK and does it work? A rapid review. *BMJ open*, *8*(9), e022560.

MacPhail, C., Khoza, N., Abler, L., & Ranganathan, M. (2016). Process guidelines for establishing intercoder reliability in qualitative studies. *Qualitative research*, *16*(2), 198-212.

Madigan, D. J., & Kim, L. E. (2021). Does teacher burnout affect students? A rapid review of its association with academic achievement and student-reported outcomes. *International journal of educational research*, *105*, 101714.

Nearchou, F., Flinn, C., Niland, R., Subramaniam, S. S., & Hennessy, E. (2020). Exploring the impact of COVID-19 on mental health outcomes in children and adolescents: a rapid review. *International journal of environmental research and public health*, *17*(22), 8479.

Noordegraaf, M. (2007). From 'pure' to 'hybrid' professionalism. Administration and Society, 39(6), 761–785.

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International journal of qualitative methods*, *16*(1), 1609406917733847.

O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: debates and practical guidelines. *International journal of qualitative methods*, *19*, 1609406919899220.

Pegram, J., Watkins, R. C., Hoerger, M., & Hughes, J. C. (2022). Assessing the range and evidence-base of interventions in a cluster of schools. *Review of Education*, *10*(1), e3336.

Power, S., Newton, N., & Taylor, C. (2020). 'Successful futures' for all in Wales? The challenges of curriculum reform for addressing educational inequalities. *The curriculum journal*, *31*(2), 317-333.

Pressley, T., 2021. Factors contributing to teacher burnout during COVID-19. *Educational Researcher*, *50*(5), pp.325-327.

Prudenzi, A., Graham, C. D., Rogerson, O., & O'Connor, D. B. (2021). Mental health during the COVID-19 pandemic: exploring the role of psychological flexibility and stress-related variables. *Psychology & Health*, 1-24.

Reangsing, C., Punsuwun, S., & Schneider, J. K. (2021). Effects of mindfulness interventions on depressive symptoms in adolescents: A meta-analysis. *International journal of nursing studies*, *115*, 103848.

Roffey, S. (2012). Pupil Well-being—Teacher Well-being: Two sides of the same coin?. *Educational and child psychology*, *29*(4), 8.

Ross, J. A. (1992). Teacher efficacy and the effects of coaching on student achievement. *Canadian Journal of Education/Revue canadienne de l'education*, 51-65.

Rust, N.A., Abrams, A., Challender, D.W., Chapron, G., Ghoddousi, A., Glikman, J.A., Gowan, C.H., Hughes, C., Rastogi, A., Said, A. and Sutton, A., 2017. Quantity does not always mean quality: The importance of qualitative social science in conservation research. *Society & natural resources*, *30*(10), pp.1304-1310.

Saloviita, T., & Pakarinen, E. (2021). Teacher burnout explained: Teacher-, student-, and organisation-level variables. *Teaching and Teacher Education*, *97*, 103221.

Sancassiani, F., Pintus, E., Holte, A., Paulus, P., Moro, M. F., Cossu, G., ... & Lindert, J. (2015). Enhancing the emotional and social skills of the youth to promote their

Well-being and positive development: a rapid review of universal school-based randomized controlled trials. *Clinical practice and epidemiology in mental health: CP & EMH*, *11*(Suppl 1 M2), 21.

Schonfeld, I. S., & Bianchi, R. (2016). Burnout and depression: two entities or one?. *Journal of clinical psychology*, *72*(1), 22-37.

Singh, S., Roy, D., Sinha, K., Parveen, S., Sharma, G., & Joshi, G. (2020). Impact of COVID-19 and lockdown on mental health of children and adolescents: A narrative review with recommendations. *Psychiatry research*, *293*, 113429.

Stallard, P. (2013). School-based interventions for depression and anxiety in children and adolescents. *BMJ Ment Health*, *16*(3), 60-61.

Stallard, P., Simpson, N., Anderson, S., Carter, T., Osborn, C., & Bush, S. (2005). An evaluation of the FRIENDS programme: A cognitive behaviour therapy intervention to promote emotional resilience. *Archives of Disease in Childhood*, *90*(10), 1016-1019

Tamarit, A., De la Barrera, U., Schoeps, K., Castro-Calvo, J., & Montoya-Castilla, I. (2023). Analyzing the role of resilience and life satisfaction as mediators of the impact of COVID-19 worries on mental health. *Journal of Community Psychology*, *51*(1), 234-250.

Wang, M. T., Degol, J. L., Amemiya, J., Parr, A., & Guo, J. (2020). Classroom climate and children's academic and psychological well-being: A rapid review and meta-analysis. Developmental Review, 57, Article 100912.

Welsh Government (2020). *Curriculum for Wales*. Retrieved from Curriculum for Wales - Hwb (gov.wales)

Welsh Government (2021, March 15). *Framework on embedding a whole-school approach to emotional and mental well-being*. Retrieved from WG42005 (gov.wales)

# Appendix

Appendix 1: information sheet

## PARTICIPANT INFORMATION SHEET

**Ethics System Reference Number:**

**Title of Research Project:** An evaluation of teachers' views on the Connect PSHE curriculum.

**Invitation**

Dear Sir/Madam

I am writing to invite you to take part in a piece of research which will explore Should you wish your school to take part in this research I ask you to forward this information sheet on to the relevant members of staff. Before you decide to take part, you will need to understand why the research is being conducted and how it would involve your school staff. Please take time to read the following information carefully. If anything is unclear or you wish for more information, please contact one of the researchers involved in conducting this study or my using the details given at end of this document.

**Details of Project**

This study aims to evaluate the views and opinions of of teachers who have used a PSHE curriculum known as Connect. Connect is a health and Well-being curriculum for primary school children. Created by a team of educational psychologists, clinical psychologists, teachers, and world leaders in Acceptance and Commitment Therapy, Connect is the first Well-being curriculum to be fully informed by psychological research. Each term within Connect focuses on one of the *six ways to Well-being* (for examples, see Baskarod, 2019) to help children to effectively manage their thoughts, feelings, and

behaviors. In turn, Connect aims to equip children with the skills to become more resilient and relate to others.

**Why have I been asked to take part?**

Whilst the Connect PSHE curriculum is evidence-informed, children's Well-being outcomes following engagement with Connect have yet to be robustly evaluated. Connect programme may have considerable utility for school-based promotion of pupils' well-being. However, before large-scale efficacy trials to evaluate Connect can be conducted, there is a need to establish the appropriate level of teacher support needed for successful implementation of Connect. You have been asked to take part in this study because you have had experience in using the Connect curriculum. Your reported experiences and feedback of Connect will be of significant importance in the development of the programme for future users.

**What does the study involve?**

The study involves meeting with a researcher at school, at a time that is convenient for the staff involved and taking part in an interview that should take no longer than 45 minutes. The researcher will ask you a series of questions related to your experience views and opinions of the Connect curriculum. The interview will be audio recorded so that the discourse can be transcribed at a later date.

**What are the benefits of taking part?**

Although there are no individual benefits to yourself, your input will help us to evaluate and potentially improve the Connect curriculum for future users.

**What are the possible risks**?

There are no expected possible risks related to this research.

**What will happen to my data?**

Your data will be held by Bangor University, with oversite from the School of Education and Human Sciences. Data collection will be taken via online questionnaires and will be kept confidential and anonymous. Additionally, if at any

time you or your child would like to withdraw from the study you will have the right to do so.

**Who is organising or sponsoring the research?**

This research is organised with the School of Education and Human Development at Bangor University.

**What if I don't want to take part?**

It is up to you to decide whether you would like to participate in this study. Deciding not to take part will not have any consequences on yourself or the school in which you are employed. You may ask to withdraw from the participation in the research at any point. This can happen at the beginning, during or after the data collection has happened. Please inform us if you decide to withdraw, we will remove any data collected from you already.

**Who do I contact about the study?**

If you have any questions or concerns then please contact Dr Amy Hulson-Jones at: a.hulson-jones@bangor.ac.uk Tel: 01248 388597.

If you have any concerns or complaints about this study, or the conduct of individuals conducting this study, then please contact College Manager, College of Human Sciences, Bangor University, Bangor, Gwynedd LL57 2AS or e-mail huw.ellis@bangor.ac.uk.

Appendix 2: consent form

**CONSENT FORM**

Please read the statements below and mark the corresponding box to denote your consent.

| | X |
|---|---|
| I confirm that I have read and understood the **Participation Information Sheet** for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. | |
| I understand that verbatim quotes from the interview sessions may be used by the research team for research purposes, but that all quotes will be anonymised. | |
| I understand that my participation is voluntary and that I am free to withdraw at any time. | |
| I understand that there will be no the information collected about me will be used to support other research in the future, and may be shared anonymously with other researchers. | |
| I agree to take part in the above study. | |
| I have been given a copy of this form and the Participation Information Sheet | |

.....

Name

.....

School

Email

.....

Appendix 3: interview schedule

**Interview protocol**

**English Medium Schools**

**Researchable question:** What are the views, perceptions and experiences of teachers delivering the Connect curriculum to KS2 children in primary school?

**Introduction**

We are interested in your experience of using the Connect curriculum this year. We would like to find out what you thought about Connect- what went well and what improvements you would like to see if you were to use the Connect curriculum again.

I would like to thank you for agreeing to talk to us. You have signed a consent form agreeing to take part in the interview. I'll record this interview if you have consented for this, so I can transcribe it later. If you did not consent to audio recording, I will take detailed notes during our conversation. Everything that you tell me today will remain confidential and anonymous. If at any point during the interview you decide you do not want to continue, please let me know. You do not have to give me a reason for your decision.

Our discussion today should last about 45 to 60 minutes, but you can talk for as little or as long as you would like.

If you are happy with all of this, we can begin.

Prompt examples:

- Would you elaborate on that?
- Could you say some more about that?
- That's helpful. I'd appreciate if you could give me more detail.
- I'm beginning to get the picture: but some more examples might help.

**Topic 1: Implementation**

1. What is your role in the school and in the Connect project?
2. Do you have any other health and Well-being interventions in place in the school?
3. How does Connect fit in with other health and Well-being provision or interventions that you have in place in school?
4. How well does the Connect programme support the new Health and Well-being ALOE?
    - The Welsh what matters statements are developing physical health and Well-being, mental health and emotional Well-being, how decision-making impacts the quality of life of ourselves and others, how our social influences shape who we are and healthy relationships. With this in mind, can you think of how well connect supports this areas of learning?
5. Can you tell me about your experience of implementing the Connect curriculum with your pupils?
    - Did you encounter any difficulties?
    - Can you give me an example of anything that was particularly difficult?
    - What did you enjoy and what would you change?
6. Could you give me an example of something you found easy and something you found hard in implementing Connect?
    - Why?

**Topic 2: Training and teaching resources**

1. Can you tell me about your experience of the training that you have received before you started to use Connect?
    - What was useful? (Why? Examples?)
    - What wasn't useful? (Why? Examples?)
    - What, if anything, would you change about the training?
    - Do you think the training was enough to get you started?
    - What were your initial thoughts about using Connect?

2. I am going to ask you some questions about your experience of using the Connect teaching resources.

How did you find the resources? Is there anything you would change?

- Did you find the scripted lesson plans helpful?
    i. Did you feel the need to deviate from the script (if so why)
    ii. Do you feel that the script provided enough information?
    iii. We are keen to find out how teachers used the scripts, can I ask; did you have the script in front of you to read from or did you learn it prior to the lesson and deliver it by heart?
    iv. Was there anything that would have made delivering the lessons with the scripts easier?
- How did you find Audio files?
- How did you find Powerpoints?
- How did you find Worksheets?
- How did the pupils respond to the resources?

3. Turning towards the accessibility element now. How did you find accessing the resources?

Did you experience any difficulties?

We realise that hardware or internet problems might have effected the accessibility of the resources. Was this the case for you?

**Topic 3: Ongoing support (implementation support group only)**

I am going to ask you some questions about your experience of the on-site support visits from the research officer.

- What was useful? (Why? Examples?)
- What wasn't useful? (Why? Examples?)
- Part of the role of the research officer was to provide schools with feedback. What are your views on receiving the feedback? Did you find it useful?
- You were offered an onsite visit once per half term, what did you think about the frequency of these visits (too much, not enough, etc)

2. Tell me about your experiences of the online support sessions that you received from the research officer
    - What was useful? (Why? Examples?)
    - What wasn't useful? (Why? Examples?)
    - You were offered two online support sessions per half term, what did you think about the frequency of these visits (too much, not enough, etc)

**Topic 4: Outcomes**

1. How do you think your pupils are doing after three half terms of using Connect?
    - Why?
    - Examples?
    - Did you notice generalisation of the skills they have learned? i.e., Using skills taught in the PSHE lessons, in the playground, in other lessons, etc
    - Did the Connect programme meet your expectations?

2. Can you think of a specific pupil that you work with and take me through his/her journey with Connect.
    - Do you think they enjoyed the lessons?
    - Why?
    - How do you know?

3. Thinking about your professional development, did you experience any benefits from learning about and implementing Connect?
    - Why?
    - Examples?

**Topic 5: Wider implications**

1. Do you feel as though Connect could serve to foster a whole-school approach that helps to promote health and well-being across the school?
    *i. (Ask for expansion on yes/no response)*
2. Would you like to see Connect continue to be used with your pupils?
    - If yes, why?

- If no, what would have to change?

3. Would you like to see Connect being used in the rest of the school, e.g., with reception and KS1 pupils?
    - If yes, why?
    - If no, what would have to change?

Is there anything that we haven't covered that you would like to add?

That concludes the end of the interview and I would like to thank you on behalf of the whole of the research team for taking part.

Appendix 4: interview 1 with interviewee 1

interview 1 with interviewee 1.docx

Appendix 5: Interview 2 with interviewee 2

interview 2 with interviewee 2.docx

Appendix 6: Interviews 3 and 4 with interviewees 3 and 4

interviews 3 and 4 with interviewees 3 and 4.docx

Appendix 7: Interview 5 with interviewee 5

Interview 5 with interviewee 5.docx

Appendix 8: Interview 6 with interviewee 6

interview 6 with interviewee 6.docx

Appendix 9: Interview 7 with interviewee 7

Interview 7 with interviewee 7.docx

Appendix 10: spreadsheet demonstrating thematic analysis process TCA process.xlsx

Appendix 11: Connect training session 1 slides

Connect study ppt slides for session 1.O.pptx

Appendix 12: Connect training session 2 slides

Connect study ppt sides for session 2.pptx

## Chapter 5: Discussion

The evidence amassed in this MRes dissertation allows us to examine how the response to the growing mental health crisis is evolving in light of a world changing event. The COVID-19 pandemic has had a significant impact on the mental health of millions worldwide (Agarwal et al., 2021), with young pupils and those with additional educational needs experiencing the greatest losses to their overall wellbeing (Kooth, 2020; Toseeb & Asbury, 2023). In response, collectively the world is working towards a future where the impacts of the pandemic, which are likely to continue for years to come (Banks, Fancourt & Xu, 2021), are negated as effectively and as efficiently as possible. With the return to the classroom and in person learning, educational institutions are now seeking to both make up for lost time in terms of educational content, and work through the increased levels of anxiety, low mood and stress that have only been heightened in young pupils in the wake of such a lifechanging historical event. To combat such multifaceted issues, educators, researchers and practitioners are increasingly working together in a collaborative effort to produce high quality, well supported and comprehensive health and wellbeing curricula to increase the socio-emotional skills of their students and protect them against future adversities. Efforts have now begun to evaluate these initial attempts to negate the fallout of both the worsening mental health crisis and the toll of the virus on our children's ability to cope, so that we can assess their effectiveness. This masters dissertation represents one such evaluation attempt of both the current health and well-being interventions used across UK primary schools and a promising Personal Social Health and Economic curriculum, the Connect program.

In chapter 2, we set out to investigate four research questions; what health and well-being interventions are currently being carried out in UK primary schools? What is the evidence base for these UK interventions? Is it best to deliver health and well-being programs in a universal or targeted manner? Who are best suited to deliver school-based health and well-being interventions; school staff or external mental health professionals? It was found that most of the health and well-being interventions that have been investigated so far have been implemented in English primary schools, with few investigations taking place in the nations of Wales, Northern Ireland and Scotland. Social and Emotional Learning interventions, such as

PATHS, and Cognitive Behavioural Therapy interventions such as FRIENDS, were found to be the most widely used interventions in the UK. In terms of their evidence base, the greatest support was found for CBT based interventions, however due to several methodological flaws, the extent to which such programs can be endorsed as 'evidenced-based' is limited. There was also found to be a general trend where high-quality studies were more likely to report insignificant findings, and low-quality studies were more likely to report positive findings, making it difficult to draw conclusions about the strength of the evidence base underlying health and wellbeing interventions in the UK. This suggests that in future, additional high-quality investigations must continue to be conducted, with those reporting positive findings being used to guide educators and practitioners about which interventions to implement. In terms of optimal intervention delivery, educators may achieve the greatest success by implementing universal interventions in a class wide manner, but assessing the impact of the intervention with vulnerable students, who may require additional, targeted support. Educators are also best placed to deliver health and well-being interventions but should seek support from those who are knowledgeable about well-being and intervention delivery, such as school nurses or health and well-being leads.

In chapter 3, we set out to investigate the research question; how well does the Connect curriculum align with the health and well-being AoLE? In the first arm of the study, we created a mapping template to map each early learning goal and curriculum objective contained within the Connect lesson plans for years reception to 6 onto the descriptions of learning contained within the 5 'what matters' statements that make up the health and well-being area of learning and experience (AoLE) of the new curriculum for Wales. The results revealed that 95.7% of AoLE targets were covered by Connect objectives or goals, with 59.1% of goals or objectives
considered to be easy to map onto the health and well-being AoLE, 35% considered somewhat or partially able to map onto the health and well-being AoLE, and only 5.9% considered difficult to map. In the second arm of the study, 3 experienced teachers who were knowledgeable about health and well-being reviewed the mapping decisions made by the researchers in arm one of the study. It was found that the reviewers agreed with 82.1% of the researcher's mapping decisions when it came to the health and well-being AoLE. 58.6% of the time this was due to the

reviewers believing that a Connect goal or objective was easier to map onto the health and well-being AoLE than the researcher originally indicated.

In chapter 4, we set out to investigate the research question; what are the views, perceptions and experiences of teachers delivering the Connect curriculum to KS2 children in primary school? 7 primary school teachers across North Wales who had experience delivering the Connect program for 12 weeks took part in semi-structured interviews to feed back about their experiences with the program. Data from these interviews was then analysed using Thematic Content Analysis (TCA) (Braun & Clarke, 2006). Qualitative data analysis revealed 6 main themes; preconceptions/initial feelings about Connect, Perceptions/opinions towards Connect curriculum, perceptions/opinions towards Connect training, perceptions/opinions towards connect support, proposed suggestions for improvement and Connect legacy following the trial. Each theme was broken down into several associated subthemes, the most significant of which were the fact that teachers found the pre-planned curriculum incredibly useful, easy to use and navigate, and enjoyable to both students and staff. Many of the teachers highlighted the value of both the mindfulness element of the program and the DNA-V characters, particularly the Advisor, who students were able to relate to and utilise to overcome challenges in their daily lives. Many also discussed how the program was able to facilitate the strengthening of the pupil-teacher relationship and establish an open channel of communication between the two parties so that worries and anxieties could be discussed freely. However, all the teachers highlighted that some of the language and concepts utilised by Connect were too complex or abstract for their learners, particularly for young and lower ability pupils.

The findings reported in chapter 2 support those found in other rapid reviews of UK-wide school-based health and well-being programs. The finding that the outcomes most frequently reported as being positively influenced by health and wellbeing interventions were anxiety and depression, alongside self-esteem and social and emotional intelligence, has also been reported by reviews conducted by Dray et al. (2017), and Caldwell et al. (2019). The finding that CBT based interventions were the most well supported in the rapid review is also in line with UK wide reviews of school-based health and well-being programs. Caldwell et al. (2019) and Clarke et al. (2021), both highlight how CBT based programs are well supported within the

literature. The current findings also support those from international reviews, where support for CBT based interventions, particularly the FRIENDS intervention, has been reported (Dray et al., 2017; Johnstone et al., 2018). However, many of these reviews report that when support has been found for health and well-being interventions it is considered to be only weak (Caldwell et al., 2019; Mackenzie & Williams, 2018; Werner-Seidler et al., 2021), which is also in line with the findings reported in chapter 2. Furthermore, the investigations included in this review were limited in several ways, including lack of control groups, lack of reported effect sizes, the possibility of bias and contamination, and lack of long term follow up periods. This latter finding has been reported by Fenwick-Smith et al. (2018), who found that most of the international health and well-being investigations did not report long term successes. Finally, the trend found in this rapid review that low quality studies were more likely to report positive outcomes than high quality studies, which were more likely to report insignificant findings, was reported by Mackenzie and Williams' (2018) rapid review, which was further supported by the current research. The majority of UK and international reviews concluded that they were unable to fully endorse the use of any single school-based health and well-being intervention due to the lack of rigorous research available in the literature. This is in line with the conclusion of the present research, which suggests that further high-quality studies need to be conducted before conclusive guidance for educators and practitioners about the best supported health and well-being intervention to implement in schools can be disseminated.

Chapter 3 represents one of the only known attempts that we are aware of to objectively map a health and well-being intervention onto the Curriculum for Wales, to assess the extent to which it meets the health and well-being needs of that country. This therefore makes it difficult to relate the findings of the research to the wider literature. However, the findings of the research conducted in chapter 3 are positive in nature and demonstrate that the Connect program is able to comprehensively meet the targets and requirements set out in the health and wellbeing AoLE, and embodies the values upheld by the nation as a whole. What we currently do know is that educators find it difficult to engage with the literature surrounding evaluations of health and well-being interventions, making it challenging for educational institutions to select a well-being program that is well

catered to the needs of their pupils (See, 2018). This is largely because educators often do not have the time, capacity or skillset to engage with complex academic text (Bas & Kivilvim, 2017; Gleeson et al., 2022; Hemsley-Brown & Sharp, 2003), leading them to rely on their own experiences and the word of other teachers (Greany & Brown, 2017; Walker, Nelson & Bradshaw, 2019). This research aimed to bridge the gap between academic literature and educator engagement somewhat, by involving educators as reviewers for the mapping process. This way school staff are able to easily access a document that clearly maps out how each Connect lesson meets the needs of each target set out in the health and well-being AoLE and means that they do not have to search through pages of academic text in order to access the information they need. The clear mapping process has also been reviewed by other educators, who largely agreed with the researcher's mapping decision. This means that the results are supported by their colleagues and peers, two groups that school staff would typically turn to share ideas and experiences with to make decisions about which health and well-being program to implement (Greany & Brown, 2017; Walker, Nelson & Bradshaw, 2019). Both factors may increase the chance of educators engaging with evidence in support of the Connect curriculum, and thus may increase the widespread use of a promising, theory driven intervention.

Chapter 4 revealed several key benefits and challenges when it came to implementing the Connect curriculum, that were in line with other qualitative evaluations of health and well-being programs used across UK primary schools. The finding that the pre-planned program was incredibly helpful as it did not further add to the workload of busy teachers is in line with findings that educators across the UK are facing burnout due to their overwhelming responsibilities (Saloviita & Pakarinen, 2021). However, positively, Connect may be able to reduce this workload by offering a well evidenced pre-planned curriculum that teachers can invest in and follow without it requiring additional preparation, planning or research. The program was also revealed to be easy to use, a finding that is in line with Kelly, Longbottom, Potts and Williamson's (2004) qualitative investigation of the PATHS program, a
curriculum that is widely used across the UK. The finding that the Connect content was enjoyable and engaging for children is in line with the findings of other
qualitative investigations of health and well-being interventions that were found to be fun and engaging, and also led to quantitative gains in self-esteem and reductions in anxiety (Kelly et al., 2004; Stallard et al., 2005). However it is in contrast with qualitative

investigations of the Roots of Empathy program, which was reported by staff as lacking in creativity and originality (Connolly et al., 2018). Both the mindfulness element of the program and the DNA-V characters, particularly the Advisor, were considered by staff to be invaluable parts of the program, that students readily engaged with, and staff utilised effectively. This is in line with a multitude of studies demonstrating the benefits of mindfulness in a school-based setting (Reangsing, Punsuwup & Schneider, 2021), and is in support of research that demonstrates the Advisor to be easy for children to understand, relate to, and utilise in their daily lives to solve problems and overcome challenges (Hayes & Ciarrochi, 2015). Finally, the finding that the program was considered too difficult in terms of the language and concepts used is in line with research conducted by Attwood, Meadows, Stallard and Richardson (2012), where it was found that some of the components of the CBT intervention being evaluated were too advanced.

The findings presented in each chapter of this thesis add to the literature in the UK and Wales and raise important points about how we approach health and well-being education across the nation that require further discussion. Chapter 2 highlighted how very few investigations of health and well-being have been conducted in primary schools in the UK and Wales. All 5 of the investigations included in the review that were conducted in Wales were evaluations of The Incredible Years program, all of which were conducted by Hutchings et al., meaning there is a possibility of bias that may confound any conclusions we can draw from these studies. This highlights the value of chapters 3 and 4 of this thesis, as they represent two of the few attempts to understand Wales's approach to health and well-being. Not only this, but both chapters centre educators in Wales at the heart of the research process, so that efforts can begin to respond to the professional needs of teaching staff and the health and well-being needs of their pupils. In the wake of the introduction of the Curriculum for Wales, educators are now encouraged to place the health and well-being of their pupils at the heart of everyday school life (Welsh Government, 2020). This will likely mean that future research in Wales will focus more intently on investigating how schools deliver well-being education and may well mean that a greater number of institutions choose to invest in externally developed health and well-being interventions. It will be interesting to see how researchers continue to evaluate such interventions, as with the well-being of pupils being such a crucial priority in Wales, it is essential that health and well-being interventions are rigorous and of high quality to effectively impact the health of pupils across the nation.

Chapter 3 demonstrated that the Connect curriculum is able to be well mapped onto the health and well-being AoLE. This is a positive finding because it means that teachers who subscribe to the program will be provided with a pre-planned curriculum that is able to meet almost all of the requirements of the Welsh curriculum when it comes to health and well-being. This means that teachers will not have to expend any additional time or energy planning, researching and sourcing health and well-being content, as the research conducted will allow educators to see exactly how each Connect lesson covers an area of the health and well-being AoLE. This finding is particularly significant when we consider the high levels of burnout currently faced by teachers across the UK (Pressley, 2021). With the introduction of the new curriculum, burnout levels will likely increase even further amongst teachers in Wales. Teachers will face demands to stretch themselves more than they currently are (Long, Hawkins, Murphy & Moore, 2023), and change their whole approach to teaching so that content can be delivered in a flexible and cross curricular manner (Welsh Government, 2020). The new curriculum also places health and well-being education at its heart, and as a result, teachers are tasked with not only being responsible for delivering well-being content, but weaving it into all AoLEs. This role change was considered by Evans (2022) to be an example of 'reprofessionalisation' (Noordegraaf, 2007), with teachers believing that the new curriculum will require them to drastically change the way they teach (Power, Newton & Taylor, 2020). Two qualitative investigations have highlighted that although many teachers are excited by the prospect of the new curriculum, the majority are also apprehensive about the immense changes they are being faced with (Power, Newton & Taylor, 2020), and are worried about the lack of guidance currently available to them about how to meet the needs of each area of learning and experience (Hughes & Lewis, 2020). The results of the mapping investigation may therefore reduce some of the burden placed onto teachers in Wales in the face of the current curriculum changes, as it reassures those who are considering implementing the Connect curriculum that the program is able to meet the needs of the health and well-being AoLE and is able to be used flexibly throughout the school day to provide health and well-being education whenever appropriate.

Chapter 4 demonstrated that many teachers reported that the Connect program was able to establish a stronger bond between teachers and pupils. This is in line with the conclusions of chapter 1, which recommend that teachers are best suited to delivering health and well-being programs due to the finding that teacher-led implementation is able to nurture and further develop the relationship between educators and students

(Hutchings et al., 2007) which is in turn associated with better health and well-being options (Wang, Degol, Amemiya, Parr & Guo, 2020), and demonstrates that teachers in Wales may well be a viable option through which health and well-being interventions can be fostered. Furthermore, Long, Hawkins, Murphy and Moore (2023) conducted qualitative interviews with teachers in Wales, and found that the health and well-being AoLE has helped establish health and wellbeing as a priority within education, rather than an afterthought to more 'core' academic subjects. This is in line with the findings of chapter 3 of this dissertation, where it was found that teachers felt Connect was able to transform the way they thought about well-being, so that it was at the forefront of their mind when they interacted with a pupil. This demonstrates that Connect is able to achieve a crucial target of the Curriculum for Wales, which promotes well-being education as the key to overall student performance, satisfaction and learning.

Chapter 4 also revealed that the well-researched, easy to use and pre-planned nature of Connect allowed teachers to feel confident about the content they were delivering, even when they were unfamiliar with the area of health and wellbeing, it also allowed them to feel as though they were making a real difference with their students. This is in line with findings that demonstrate that teachers in Wales who were worried about delivering health and well-being content were able to feel more confident that they were meeting the targets of the health and well-being AoLE by subscribing to an externally created pre-planned health and well-being program (Hughes & Lewis, 2020). This suggests that such programs are a viable option for teachers in Wales to deliver effective health and well-being content when faced with the daunting task of comprehensively meeting the well-being needs of their students, especially when such programs are able to demonstrate explicitly how they are able to meet the needs of the Welsh curriculum, such as Connect. In addition, interviews conducted by Hughes and Lewis (2020) revealed that many teachers in Wales found it reassuring to have an established program leader within the school who was responsible for the overarching implementation of an external health and well-being program and thus able to support individual staff members in their delivery of the program. In contrast, in chapter 4 many of the teachers felt that Connect was easy to implement, even when they were unfamiliar with the area of health and well-being, and it was even revealed that those who received additional implementation support from a research officer felt that the visits were unnecessary due to the program running so smoothly. This would suggest that additional support from a health and well-being lead or research support officer is not

required to facilitate successful intervention delivery. However, it is important to note that 3 out of 7 teachers were health and well-being leads themselves, and that many teachers struggled with the difficult concepts and language utilised within Connect with their younger pupils, suggesting that additional guidance from designated sources of support, such as health and well-being leads should not be ruled out, as was recommended in chapter 2.

In addition, chapter 4 revealed that teachers felt the Connect program was transferable and able to easily permeate into other areas of learning outside of the health and well-being AoLE, with both students and teachers utilising the teachings and tools of Connect in lessons such as physical education and Science. This is in line with the findings of Hughes and Lewis (2020) who demonstrated that teachers in Wales felt that an externally created mindfulness program was able to support development across the curriculum and all areas of learning, with students using mindfulness techniques during their maths and literacy sessions in order to facilitate learning. As Connect incorporates mindfulness into the majority of its scheduled lesson plans, it may be that mindfulness-based health and well-being programs are a promising option for educators in Wales, as their teachings and techniques are transferable, and support learning in a cross-curricular manner, which is an essential target of the new curriculum for Wales (Welsh Government, 2020). This demonstration that Connect is able to weave into all areas of the curriculum is also a positive finding when we consider the recommendations of chapter 2, that health and well-being interventions be delivered on a universal basis, with options for further targeted intervention if necessary. One of the reasons universal intervention delivery was promoted as the optimal implementation method was due to the fact that universal delivery allows health and well-being knowledge to be consolidated throughout the school day and reinforced across all learning areas. This further demonstrates that Connect is a viable option for teachers in Wales due to the fact that when delivered on a universal basis it is able to continue to positively influence the health and well-being of students outside of dedicated PSHE sessions, as it allows teachers to easily weave lesson content into all areas of school life.

Finally, qualitative interviews with teachers also revealed that they would have liked to have seen more explicitly how the Connect curriculum is able to meet the goals of the health and well-being AoLE of the Welsh curriculum. They explained that if the links

between the Connect program and the Welsh curriculum were made clear, then they would be more inclined to invest in, and use, the program with their primary aged students. This highlights the value of, and need for, the research conducted in chapter 3 of this master's dissertation. The mapping document created in chapter 3 has therefore been explicitly requested by teachers in North Wales, who delivered the program for 12 weeks with their students, and who would use the document to inform their decisions surrounding long-term investment in Connect.

Each chapter also relates to the whole-school approach to health and wellbeing guidance published by the Welsh Government (2021). This vitally important document offers advice to educators in Wales about how best to support learner's mental well-being in a holistic way, where health and well-being education is delivered across the school, and is endorsed by all staff and accessed by all pupils. In chapter 2 it was revealed that when it comes to who should receive health and well-being interventions, from the evidence examined it appears that primary schools should seek to deliver health and well-being interventions on a universal basis so that all pupils may benefit regardless of their individual needs, but that targeted interventions should be delivered for pupils who require additional mental health support. This recommendation is in line with the whole-school approach to health and well-being document (Welsh Government, 2021), which sets out a framework that schools in Wales should adopt, whereby well evidenced health and well-being programs should be delivered on a whole-school basis, but more intensive targeted interventions should be delivered to at risk pupils if required. The findings of the systematic review also resulted in a recommendation that school staff, particularly class teachers, should deliver health and well-being interventions, but seek support from those knowledgeable about health and well-being, such as school nurses or the designated health and well-being lead. This recommendation was made largely on the basis that when school staff deliver health and well-being programs, it can lead to a closer teacher-student bond, which can in turn positively impact well-being. Strong student-teacher relationships are also considered key by the Welsh government's (2021) whole-school proposal, which further goes into detail about how schoolteachers should seek out the support of a chief health and well-being implementation lead, demonstrating how the conclusions of the systematic review are in line with the recommendations of the government of Wales.

In chapter 3 it was revealed that Connect was able to be successfully mapped onto the Welsh curriculum for all year groups (reception-year 6), demonstrating the programs ability to be delivered across the whole school, which is further in line with the Welsh Government's (2021) recommendations surrounding whole-school health and well-being education. Finally, in chapter 4 it was revealed that Connect resulted in a closer student-teacher bond, as the program allowed an open channel of communication to develop where fears and anxieties could be shared and resolved. Again, this student-teacher bond is promoted by the whole-school approach
guidance (Welsh Government, 2021), meaning that Connect is able to achieve a key target set out by the Welsh government when it comes to health and well-being education, further establishing the program as a viable choice for teachers in Wales. The Welsh government guidance (2021) also highlights that strong relationships are crucial between staff members, parents and the wider community in order for a whole-school approach to be implemented successfully. The thematic analysis revealed that many of the teachers interviewed felt that Connect was missing a home-school link that would allow the parents to get involved with health and wellbeing education and reinforce the messages of the Connect program at home. If Connect were able to supplement its curriculum with a way to involve parents and carers then it would further meet the targets of the Welsh Government's (2021) whole school-approach to health and well-being.

**Strengths, limitations and directions for future research**

This masters dissertation is a valuable addition to the literature in the UK and Wales and holds a number of strengths. Chapter 2 represents one of the few rapid reviews known to the researcher that evaluates the evidence base of UK school-based health and well-being interventions and provides us with crucial information about the picture of mental health and well-being programs utilised throughout the British nations prior to the COVID-19 pandemic, which wrought devastating impacts upon the well-being of many young people. This allows future research to continue to assess the use and evidence base of school-based interventions as the landscape shifts, providing comparisons about how provision has, and will continue to change both during and after the pandemic. The rapid review also takes forward the research of existing reviews, by widening the inclusion criteria to include findings from a greater number of studies with a range of designs, outcomes, and implementation factors. It also collates information

crucial to successful implementation delivery by providing recommendations to educators and practitioners about who is best to deliver school-based interventions, and which populations are best to receive them. There are no existing reviews investigating UK primary school-based health and well-being interventions that consider these crucial factors known to the researcher.

In chapter 3, the mapping document created clearly sets out how each Connect lesson covers a specific area of the health and well-being AoLE in Wales and demonstrates how well each lesson plan was able to cover the targets set out within the AoLE. The accessible nature of the document is a key strength of the research, as it has previously been found that teaching staff find it difficult to engage with academic literature, due to lack of time and research skills (Hemsley-Brown & Sharp, 2003). The mapping document allows those who engage with it to quickly come to terms with the researcher's process, even if they are not used to accessing academic text. An additional strength is that the mapping document can be shared with other researchers to assess the extent to which current and future health and well-being programs reflect the goals and values within the Welsh curriculum, so that a comparison can be drawn between well-being curricula. The strength of the fourth chapter of this dissertation lies in the fact that the researcher chose to follow the qualitative research guidance published by Nowell, Norris, White and Moules (2017) to establish trustworthiness, which was further demonstrated by the high ICR score reported, establishing the research as a reliable thematic content analysis of a promising health and well-being curriculum utilised in Wales.

However, the research conducted within all 3 chapters is not without flaw. In chapter 2, the researcher chose to assess the quality of the studies included in the review using the Down's and Black (1998) checklist. However, this may not have been an appropriate tool to assess the quality of the qualitative research included within the review. This limitation makes it difficult to draw conclusions about the results from qualitative studies. In chapter 3, a further limitation of the research comes from the researcher's decision to map Connect Learning objectives and Early Learning Goals onto more than one description of learning within the health and wellbeing AoLE. Although the researcher chose to do this in order to reflect the fact that certain goals and objectives spanned more than one of the targets set out in the descriptions of learning, it may have skewed the results of the data analysis. Finally, the small sample size utilised in the thematic content analysis limited the

conclusions that can be drawn about the qualitative findings. Hennink and Kaiser (2022) report that to code data from qualitative interviews in a meaningful way when conducting a TCA, between 9 and 17 participants are required. Due to the time of year when recruitment took place, a busy summer school term, only 7 participants were able to be recruited. In addition, the technical issues experienced when conducting virtual interviews meant some of the data was lost.

In future, researchers should continue to monitor the use and evidence base of UK school-based health and well-being interventions to assess how provision changes in response to the growing mental health crisis and in the wake of the pandemic. Research should focus on providing a scope of the health and well-being programs used in Wales, Scotland, and Northern Ireland, as at present the lack of research that has been conducted in these nations means we only have a limited picture of how health and well-being education is being addressed outside of England. Furthermore, as each nation has its own guidance about personal, social and economic health, researchers could compare and contrast how differences in guidance influence classroom practice when it comes to health and well-being. This continued evaluation should also investigate ways in which findings can be shared with teaching professionals in an accessible format, so that educators are aware of which programs have the strongest theoretical and practical evidence base, rather than relying on the word of colleagues. In addition, Researchers and practitioners should carefully consider the findings of chapter 3 of this dissertation and use them to tailor the Connect program accordingly, specifically for use in Wales. The mapping document specifically highlights the areas of the health and well-being AoLE considered by the researchers to not be sufficiently covered by the Connect curriculum, so efforts can now begin to supplement the Connect lesson plans, so that their content is able to meet all of the objectives set out in the Welsh curriculum. This tailoring of the Connect content should also take into consideration the findings of the TCA research, and should contemplate the use of differentiated worksheets that would cater to lower ability pupils and use more simplistic language. This way the well-being messages contained within the curriculum are less likely to be lost due to misunderstanding, ultimately resulting in a more inclusive PSHE program. When seeking to further tailor connect to the Curriculum for Wales, researchers should continue to involve educators at the heart of this process in order to achieve a co-constructed health and well-being curriculum that suits their needs. Finally, to ensure that the Connect program, which has been demonstrated to

reflect the values and goals of the Curriculum for Wales to a high degree, is accessible to all in Wales, researchers and practitioners should make it a priority to translate the program into the medium of Welsh so that it can be utilised in all schools across the nation, whatever the language of delivery.

## Conclusion

To conclude, this dissertation adds to the literature in Wales and the UK surrounding health and well-being implementation, and holds important implications about the directions future research should take when trying to explore how we may facilitate easier and more effective intervention implementation. Chapter 2 revealed that CBT based and Social and Emotional Learning interventions are the most widely utilised programs across the UK. The strongest evidence base was found for CBT-based interventions, however this evidence base is limited by the mixed quality of the studies. There was also a general trend found where low quality studies tended to report positive findings and high-quality studies tended to report insignificant findings. Chapter 3 revealed that we can effectively map the Connect program onto 95.7% of the health and well-being AoLE, with almost 59.1% of Connect Learning Objectives and Early Learning Goals considered by the researcher to map well, demonstrating that the aims of the Connect program are in line with those set out in Wales's health and well-being focused curriculum. Finally, the thematic content analysis conducted in chapter 4 revealed that teachers in the Northwest of Wales who delivered the Connect curriculum for 12 weeks with primary aged children found the program to be easy to use, practical, enjoyable and beneficial to both students and staff. Children were able to relate to the characters within the DNA-V model, particularly the Advisor, who was utilised by staff and pupils alike to overcome stressful or challenging situations. The Connect curriculum was easily transferable to other learning areas, meaning Connect content was able to be delivered in a cross-curricular manner. The mindfulness element of the program was found to be particularly useful by staff, as it promoted a calm and relaxed school environment and readied the students for learning after periods of high excitement and energy. A stronger pupil-teacher bond was established during Connect delivery, due to the creation of an open channel of communication where children could discuss their fears and anxieties freely. However, the content of the Connect sessions proved to be too difficult for younger pupils and lower ability learners due to the complex language and concepts used. Future research should seek to build on these findings by continuing to conduct reviews of

the use and evidence base of school-based health and well-being programs in the UK in response to the pandemic and mental health crisis, with a particular focus on the nations of Wales, Scotland and Ireland. It should also seek to supplement the Connect curriculum with additional content that seeks to cover the sections of the health and well-being AoLE left unfulfilled, and with differentiated worksheets that cater to different learning abilities and styles so that the program is accessible to all students.

## References

Agarwal, P., Kaushik, A., Sarkar, S., Rao, D., Mukherjee, N., Bharat, V., ... & Saha, A. K. (2021). Global survey-based assessment of lifestyle changes during the COVID-19 pandemic. *Plos one*, *16*(8), e0255399.

Attwood, M., Meadows, S., Stallard, P., & Richardson, T. (2012). Universal and targeted computerised cognitive behavioural therapy (Think, Feel, Do) for emotional health in schools: results from two exploratory studies. *Child and Adolescent Mental Health*, *17*(3), 173-178.

Banks, J., Fancourt, D., & Xu, X. (2021). Mental health and the COVID-19 pandemic. *World happiness report*, *2021*, 107-130.

Bas, G., & Kivilcim, Z. S. (2017). Teachers' Views about Educational Research: A Qualitative Study. *International Journal of Progressive Education*, *13*(2), 6073.

Braun, V. and Clarke, V., 2006. Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), pp.77-101.

Bücker, S., Nuraydin, S., Simonsmeier, B. A., Schneider, M., & Luhmann, M. (2018). Subjective well-being and academic achievement: A meta-analysis. *Journal of Research in Personality*, *74*, 83-94.

Caldwell, D. M., Davies, S. R., Hetrick, S. E., Palmer, J. C., Caro, P., López-López, J. A., ... & Welton, N. J. (2019). School-based interventions to prevent anxiety and depression in children and young people: a rapid review and network meta-analysis. *The Lancet Psychiatry*, *6*(12), 1011-1020.

Clarke, A., Sorgenfrei, M., Mulcahy, J., Davie, P., Friedrich, C., & McBride, T. (2021). Adolescent mental health: a rapid review on the effectiveness of school-based interventions. *Early Intervention Foundation*, 1-87.

Connolly, P., Miller, S., Kee, F., Sloan, S., Gildea, A., McIntosh, E., & Bland, J. M. (2018). A cluster randomised controlled trial and evaluation and cost-effectiveness analysis of the Roots of Empathy schools-based programme for

improving social and emotional well-being outcomes among 8-to 9-year-olds in Northern Ireland. *Public Health Research*.

Downs, S. H., & Black, N. (1998). The feasibility of creating a checklist for the assessment of the methodological quality both of randomised and non-randomised studies of health care interventions. *Journal of epidemiology & community health*, *52*(6), 377-384.

Dray, J., Bowman, J., Campbell, E., Freund, M., Wolfenden, L., Hodder, R. K., ... & Wiggers, J. (2017). Rapid review of universal resilience-focused interventions targeting child and adolescent mental health in the school setting. *Journal of the American Academy of Child & Adolescent Psychiatry*, *56*(10), 813-824.

Egan, M., Daly, M., & Delaney, L. (2015). Childhood psychological distress and youth unemployment: Evidence from two British cohort studies. *Social Science & Medicine*, *124*, 11-17.

Evans, G. (2022). Back to the future? Reflections on three phases of education policy reform in Wales and their implications for teachers. *Journal of educational change*, *23*(3), 371-396.

Fenwick-Smith, A., Dahlberg, E. E., & Thompson, S. C. (2018). Rapid review of resilience-enhancing, universal, primary school-based mental health promotion programs. *BMC psychology*, *6*, 1-17.

Gleeson, J., Harris, J., Cutler, B., Rosser, B., Walsh, L., Rickinson, M., ... & Cirkony, **C. (2022). School educators' use of research: findings** from two large-scale Australian studies. *Research Papers in Education*, 1-25.

Greany, T., & Brown, C. (2017). The Evidence Informed School System in England: Where Should School Leaders Be Focusing Their Efforts?. *International Journal of Education Policy and Leadership*, *12*(3), n3.

Hayes, L. L., & Ciarrochi, J. V. (2015). *The thriving adolescent: Using acceptance and commitment therapy and positive psychology to help teens manage emotions, achieve goals, and build connection*. New Harbinger Publications.

Hemsley-Brown, J., & Sharp, C. (2003). The use of research to improve professional practice: A rapid review of the literature. *Oxford review of education*, *29*(4), 449-471.

Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A rapid review of empirical tests. *Social science & medicine*, *292*, 114523.

Hughes, S., & Lewis, H. (2020). Tensions in current curriculum reform and the development of teachers' professional autonomy. *The curriculum journal*, *31*(2), 290-302.

Hutchings, J., Daley, D., Jones, K., Martin, P., Bywater, T., & Gwyn, R. (2007). Early results from developing and researching the Webster-Stratton incredible years teacher classroom management training programme in North West Wales. *Journal of Children's Services*.

Johnstone, K. M., Kemps, E., & Chen, J. (2018). A meta-analysis of universal school-based prevention programs for anxiety and depression in children. *Clinical child and family psychology review*, *21*, 466-481.

Kelly*, B., Longbottom, J., Potts, F., & Williamson, J. (2004). Applying emotional intelligence: Exploring the promoting alternative thinking strategies curriculum. *Educational Psychology in Practice*, *20*(3), 221-240.

Kooth (2020, April 27). *How has COVID-19 Affected the Mental Health of Children and Young People in the United Kingdom?* Retrieved from Kooth infographic COVID affecting mental health of YP (2).pdf

Long, S. J., Hawkins, J., Murphy, S., & Moore, G. (2023). School health and well-being and national education system reform: A qualitative study. *British Educational Research Journal*.

Mackenzie, K., & Williams, C. (2018). Universal, school-based interventions to promote mental and emotional well-being: What is being done in the UK and does it work? A rapid review. *BMJ open*, *8*(9), e022560.

Noordegraaf, M. (2007). From ‘pure’ to ‘hybrid’ professionalism. Administration and Society, 39(6), 761–785.

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International journal of qualitative methods*, *16*(1), 1609406917733847.

Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental health of young people: a global public-health challenge. *The Lancet*, *369*(9569), 1302-1313.

Power, S., Newton, N., & Taylor, C. (2020). ‘Successful futures’ for all in Wales? The challenges of curriculum reform for addressing educational inequalities. *The curriculum journal*, *31*(2), 317-333.

Pressley, T., 2021. Factors contributing to teacher burnout during COVID-19. *Educational Researcher*, *50*(5), pp.325-327.

Reangsing, C., Punsuwun, S., & Schneider, J. K. (2021). Effects of mindfulness interventions on depressive symptoms in adolescents: A meta-analysis. *International journal of nursing studies*, *115*, 103848.

review. *International journal of environmental research and public health*, *17*(22), 8479.

Saloviita, T., & Pakarinen, E. (2021). Teacher burnout explained: Teacher-, student-, and organisation-level variables. *Teaching and Teacher Education*, *97*, 103221.

See, B. H. (2018). ‘Evaluating the evidence in evidence-based policy and practice: Examples from rapid reviews of literature. Research in Education, 102(1), 37– 61.

Stallard, P., Simpson, N., Anderson, S., Carter, T., Osborn, C., & Bush, S. (2005). An evaluation of the FRIENDS programme: A cognitive behaviour therapy intervention to promote emotional resilience. *Archives of disease in childhood*, *90*(10), 1016-1019.

The Future Generations Commissioner for Wales (2015). *Well-being of Future Generations (Wales) Act 2015.* Retrieved from Well-being of Future Generations (Wales) Act 2015 – The Future Generations Commissioner for Wales

Toseeb, U., & Asbury, K. (2023). A longitudinal study of the mental health of autistic children and adolescents and their parents during COVID-19: Part 1, quantitative findings. *Autism*, *27*(1), 105-116.

Walker, M., Nelson, J., & Bradshaw, S. (2019). Teachers' Engagement with Research: What Do We Know? A Research Briefing. *Education Endowment Foundation*.

Wang, M. T., Degol, J. L., Amemiya, J., Parr, A., & Guo, J. (2020). Classroom climate and children's academic and psychological well-being: A rapid review and meta-analysis. Developmental Review, 57, Article 100912.

Welsh Government (2020) *Curriculum for Wales*. Retrieved from Curriculum for Wales - Hwb (gov.wales)

Welsh Government (2021, March 15). *Framework on embedding a whole-school approach to emotional and mental well-being.* Retrieved from WG42005 (gov.wales)

Werner-Seidler, A., Spanos, S., Calear, A. L., Perry, Y., Torok, M., O'Dea, B., ... & Newby, J. M. (2021). School-based depression and anxiety prevention programs: An updated rapid review and meta-analysis. *Clinical Psychology Review*, *89*, 102079.