LITERATURE REVIEW

Wellbeing Interventions for Schoolteachers Working in Childhood and Adolescence

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Wellbeing Interventions for Schoolteachers Working in Childhood and Adolescence

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in association with

The International Baccalaureate Organization

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This literature review serves as a companion to the summary report, Wellbeing Interventions for Schoolteachers Working in Childhood and Adolescence. This report can be found in full at wellbeing.hmc.ox.ac.uk/schools

Further information can be found on the International Baccalaureate website at ibo.org/research

Executive Summary

This report builds on the research explored in the Wellbeing for Schoolteachers report, to provide a broad overview of the current state of teacher wellbeing literature and provide insights into different teacher wellbeing interventions.

Teacher wellbeing is of considerable importance, as teacher wellbeing has been shown to influence teacher performance and their ability to educate their students, which in turn can influence student outcomes. Findings from across the globe indicate that teachers often experience poor wellbeing and mental health, and that this has detrimental effects on schools.

The Current Evidence for Teacher Wellbeing Interventions

Empirical study of teacher wellbeing interventions is not as advanced as the field of student wellbeing interventions, and as such the literature does not point towards a particular teacher wellbeing intervention to be implemented across schools. Instead, the literature calls for a multifaceted approach to teacher wellbeing intervention, which considers an individual school's context.

Teacher wellbeing interventions often fall into the following categories, though it should be noted that intervention elements might crossover these different categories:

- Mindfulness and positive psychology
- Physical exercise
- Professional development
- Whole school approach

The report highlights key recommendations for schools to keep in mind when considering teacher wellbeing intervention implementation:

- Promoting autonomy within an intervention
- Context-specific design to meet the specific needs of the school
- Group format whereby collaboration is encouraged
- Professional knowledge in the form of skilled professional instructors of a wellbeing intervention (such as mindfulness interventions)
- Regular meetings to help reinforce and fortify engagement with an intervention

Further research must be conducted on teacher wellbeing interventions, whereby teacher wellbeing is an explicit outcome measured. Research must also be encouraged in more diverse contexts, to allow for the literature to be more representative of different pedagogical practices, cultural values, and societal expectations.

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Introduction

The IBO and the Wellbeing Research Centre at the University of Oxford have worked together on a series of reports focused on wellbeing in schools. Two foundational reports, 'Wellbeing in Education in Childhood and Adolescence' and 'Wellbeing for Schoolteachers', have been published and give detailed information about wellbeing in schools. We suggest that readers first explore these foundational reports to gain a detailed understanding of wellbeing in schools before reading this series of brief reports on the drivers of wellbeing.

For this report, it is important to highlight what we mean by wellbeing. In our published reports (exploring the wellbeing of young people and schoolteachers), we focus on subjective wellbeing, which refers to the individual's perception of their own wellbeing. In schools, wellbeing is often used as a catch-all term for anything that sits outside academic attainment. This makes it difficult for schools to measure and implement changes, because the parameters are so broad and intangible. Wellbeing science is an established area of academic research, and we employ insights from the empirical science of wellbeing to inform these reports.

In school settings, wellbeing is often misunderstood as simply the opposite of mental ill health, or as happiness. However, in the 'Wellbeing in Education in Childhood and Adolescence' report, we clarify the differences between these concepts and how schools can use these definitions to decide which aspects of wellbeing to measure and impact. The definitions we recommend in the report remove the drivers of wellbeing (like resilience, mental health, family, peers, teachers, etc.) from the definition and focus on the three key areas of subjective wellbeing: life satisfaction; affect; and eudaimonia.

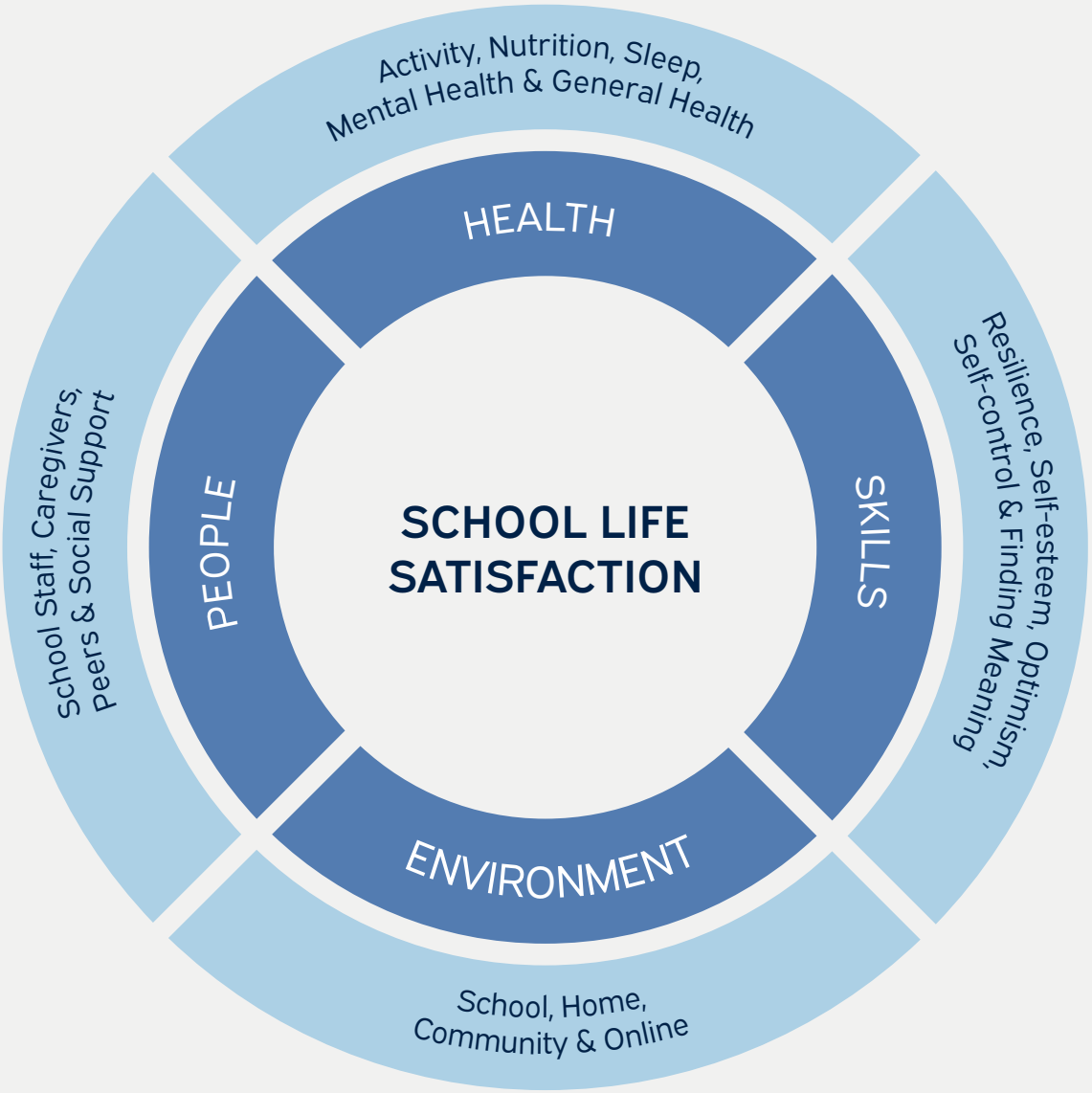
FIGURE 1: COMPONENTS OF WELLBEING

LIFE SATISFACTION	This element captures people's satisfaction with their lives, their perception, and experience.
AFFECT	The feelings, emotions, and states of a person at a particular timepoint, including both positive affect (e.g., joy, happiness, pride) and negative affect (e.g., sadness, depression, anxiety).
EUDAIMONIA	Whether people feel their life is worthwhile or has purpose and meaning (this can include autonomy, capabilities, competencies, and other areas of psychological functioning).

The key performance indicators (KPIs) of the two wellbeing frameworks for this project are satisfaction with school life (for young people) and satisfaction with job (for schoolteachers). 'Satisfaction with school life' refers to the overall contentment and fulfilment of students within the educational environment. On the other hand, 'satisfaction with the job' pertains to the contentment and fulfilment of schoolteachers in their professional roles and experience. We focus on the life satisfaction area of subjective wellbeing as the key outcome for the frameworks for practical reasons, but we also emphasise the importance of affect and eudaimonia. These two KPIs were selected as they represent the areas that schools can most influence.

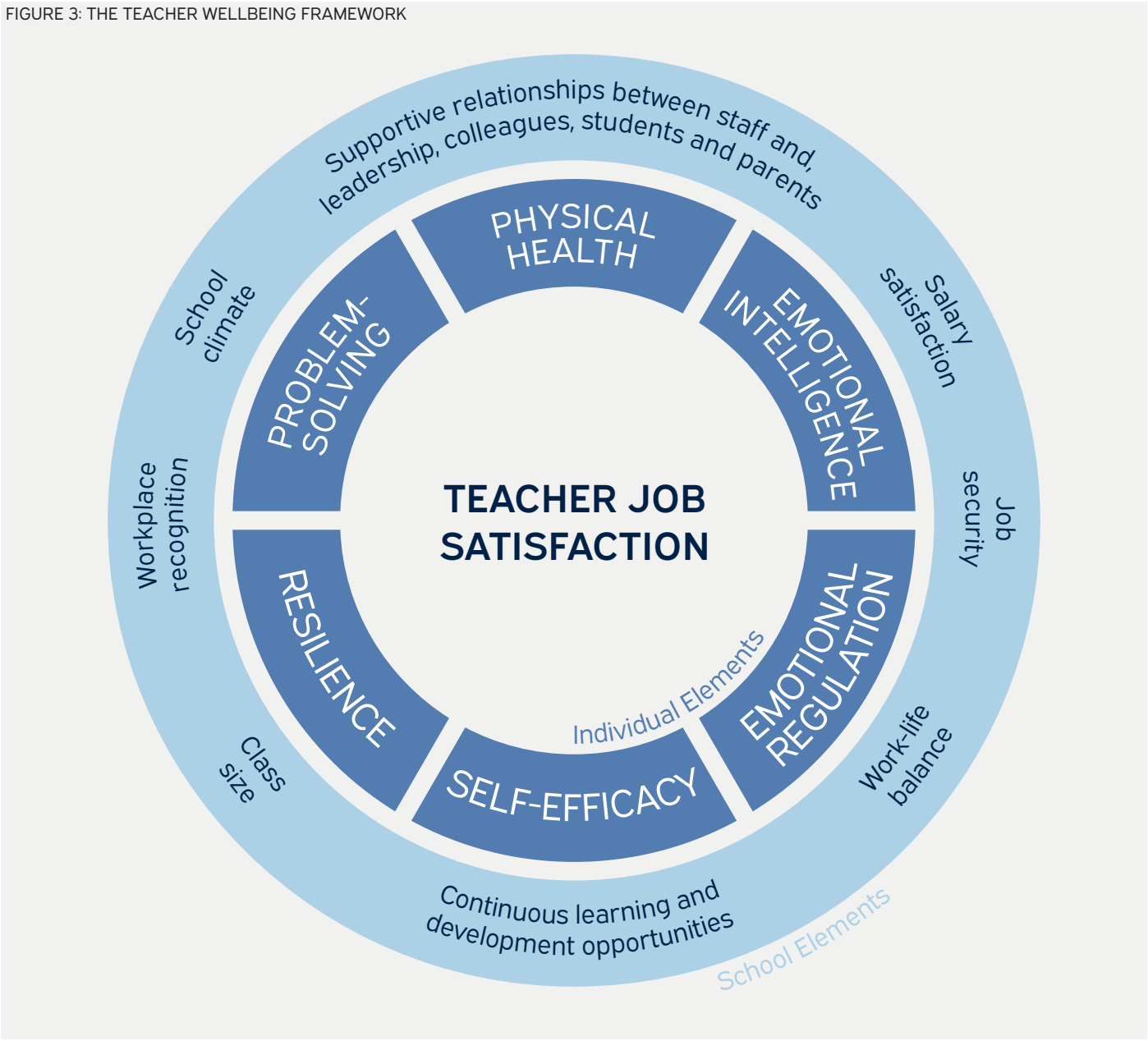
The two frameworks are presented below. These frameworks have the key performance indicator (KPI) or outcome variable in the centre, and all the drivers that research evidence has suggested influence these outcomes surrounding the KPI. It is important to note that these frameworks only focus on the evidence for wellbeing and, as such, there may be other research that schools may wish to consider, beyond the scope of these reports, which focus on other positive outcomes for young people and teachers.

FIGURE 2: THE SCHOOL LIFE SATISFACTION FRAMEWORK



Each school is a unique ecosystem. The respective Pupil and Teacher Wellbeing Frameworks (above) have been specially designed to be flexible to the unique context of any given school. The frameworks are evidence-based and include factors that affect student and staff wellbeing. The Pupil framework focuses on wellbeing in four categories: health, people, environment, and skills. There are currently 18 drivers listed within these four categories, but these will likely expand over time as more research is conducted by scientists globally. The drivers were identified from a literature review of all the factors than can drive positive or negative changes in wellbeing for young people aged 5-18 with a particular focus on wellbeing at school. The drivers listed will have differing levels of impact on pupils depending on their age and stage, individual differences, and environmental factors that surround them, both inside and outside school. This framework gives ultimate flexibility and can be adapted over time to incorporate new insights.

FIGURE 3: THE TEACHER WELLBEING FRAMEWORK



Similarly, the teacher framework stipulates wellbeing drivers which show promise within the teacher wellbeing literature. The literature pertaining to drivers of teacher wellbeing is not as mature as drivers of student wellbeing, thus the Teacher Wellbeing Framework points towards factors which appear to influence teacher wellbeing outcomes. The Teacher Wellbeing Framework broadly categorises promising drivers into those at an individual level and school element level. The elements listed in this framework will have differential impacts on teacher wellbeing depending on the context each teacher is in.

An essential feature of these frameworks lay in their ability to allow schools to concentrate on a specific driver of wellbeing. Within the 'Wellbeing in Education in Childhood and Adolescence' and 'Wellbeing for Schoolteachers' reports we recommend a bottom-up process of listening to pupil and staff voice to determine which drivers are important in individual schools. This empowers schools to address specific concerns according to their particular needs and available resources (using measurements and interventions). Such an approach not only helps schools avoid feeling overwhelmed but also provides guidance on pathways they can initially explore to enhance wellbeing.

It should be noted that the frameworks are limited by their focus on predominantly Western cultural influences. This focus arose because the majority of the research on this topic has been conducted with Western populations. When we consider the diverse cultures across the globe, it becomes apparent that different elements of wellbeing may hold varying degrees of conceptual importance. Moreover, there might be additional elements crucial to specific cultures that are not encompassed within the

existing definition. As the research expands in this area of pupil and teacher wellbeing in other cultural contexts, the findings can be incorporated into the models to give a more globally holistic approach.

Purpose and Scope of the Focused Report

This series of intervention reports is intended to give the IBO and schools a more nuanced understanding of the drivers of wellbeing in schools. Each report contains scientific research, interventions, measurement, and discussion around a specific driver of wellbeing. Each of the topics within these reports has differing levels of scientific evidence, and one of the main aims of these reports is to summarise what we know now about a topic and what further work needs to be done. Ultimately, we aim for these reports to become part of a digital, evidence-based repository which schools can use to measure, monitor, and support, the wellbeing of young people. This intervention report focuses on teacher wellbeing interventions.

The Importance of Teacher Wellbeing

Given the anticipated rapid expansion of the teacher workforce, it is crucial to subject teaching as a vocation to critical scrutiny (UNESCO, 2022). The global observation that teachers generally experience low levels of wellbeing underscores the importance of recognising the significance of teacher wellbeing (OECD, 2020). Studies exploring teacher wellbeing frequently highlight the physical and emotional stress caused by the expectations placed on teachers due to their profession (Dudenhöffer et al., 2017; Herman et al., 2018; Maxwell et al., 2017). Research indicates that educators experience a significantly higher prevalence rate of work-related stress, depression, and anxiety compared to the UK national average (2.7% and 2%, respectively; Health Safety Executive, 2022). Tensions within the teaching profession can lead to teachers leaving their jobs (CooperGibson, 2018), putting additional strain on the remaining teacher workforce, and jeopardising their wellbeing.

The wellbeing of educators extends beyond personal fulfilment, intricately influencing professional performance and shaping the educational environment for students. Teachers' wellbeing impacts their occupational performance and their students' attainment and wellbeing. Teacher wellbeing has been found to relate to teacher productivity and creativity (Acton & Glasgow, 2015), relationships with others (Milatz et al., 2015; Spilt et al., 2011), mental and physical health (Hall-Kenyon et al., 2014; Kidger et al., 2016), as well as rates of teacher absences and attrition (Corbett et al., 2022; Toropova et al., 2021). Moreover, teachers play a pivotal role in student learning and outcomes, with teacher wellbeing influencing their ability to teach effectively. Poor teacher wellbeing has been associated with suboptimal teaching performance, as evidenced by studies highlighting its impact on primary school SAT scores (Briner & Dewberry, 2007; Gray et al., 2017; Herman et al., 2018; Puertas Molero et al., 2019).

A more detailed presentation of the current state of teacher wellbeing and the impact of teacher wellbeing can be found in the Wellbeing for Schoolteachers report (Taylor et al., 2024). Insights from research on teacher wellbeing can help us navigate the future of education. This report outlines the determinants of teacher wellbeing, the subsequent impacts of teacher wellbeing on the wider school community, the teacher wellbeing interventions that have been empirically studied thus far, and the measurement of teacher wellbeing.

Teacher Wellbeing Definition

The measurement of teacher wellbeing has not yet been universally operationalised within the literature, meaning that many different approaches are currently taken to conceptualise teacher wellbeing. Thus, different teacher wellbeing interventions have been developed and studied in relation to different understandings of what 'teacher wellbeing' as a measurable outcome is. These differences in conceptualisation of teacher wellbeing emphasise the nuances of the teaching profession, and how many of the stressors within the teaching profession are a unique amalgamation of different roles and responsibilities a given teacher has. In light of different conceptualisations of teacher wellbeing (see our 'Wellbeing for Schoolteachers' report for further information), different approaches to interventions can be taken in order to optimise teacher wellbeing. Teacher wellbeing interventions can be understood as initiatives which are consciously implemented with the aim to improve the wellbeing of those in the teaching profession through active participation in behavioural and cognitive change (Dreer & Gouasé, 2022).

In recognition of the nuanced nature of teaching, it should be noted that, like with all wellbeing interventions, school stakeholders must take a critical approach to evaluating these interventions and recognise that there are many influential factors which contribute to the wellbeing of an individual, thus any given teacher wellbeing intervention will have differential effects on all those with which the intervention is delivered. Each school is also a unique ecosystem that must be considered, taking a bottom-up approach to any interventions, including considering both teacher and pupil voice.

Determinants of Teacher Wellbeing

The determinants are the drivers which impact the change in teacher wellbeing. In order to identify determinants of teacher wellbeing, we must first make explicit the

bidirectional nature of workplace wellbeing and an individual's personal wellbeing (Warr, 1999). Thus, we must take a holistic approach to understanding teacher wellbeing and recognise that teachers have a life beyond the four walls of the classroom. Personal experiences, outside the classroom, can interact with their pedagogical ability. The evidence points to many different influential factors of teacher wellbeing outcomes, which have been thoroughly discussed in the Wellbeing for Schoolteachers report (Taylor et al., 2024).

Teacher wellbeing determinants can be categorised into four classifications:

a) Individual-level
Individual-level factors encompass characteristics, attributes, or conditions unique to each teacher, such as personality traits, age, and personal experiences. While the research on their direct impact on teacher wellbeing may lack conclusive evidence, acknowledging and addressing these individual differences remains crucial. These factors contribute to shaping the ethos, policies, and practices, within a school.

b) Role-level
Role-level determinants are closely tied to the responsibilities and functions inherent in a teacher's role. Key examples include teacher self-efficacy, reflecting confidence in teaching abilities, and teacher motivation, reflecting commitment and fulfillment in the teaching role. These factors play an intrinsic role in influencing a teacher's overall wellbeing by directly shaping their daily professional experiences.

c) School-level
School-level determinants extend to both physical and socio-relational aspects within the broader school context. Examples encompass school leadership quality, the overall school climate, and institutional attitudes. These factors collectively define the environment in which teachers operate, significantly impacting their wellbeing. Understanding and addressing school-level determinants informs interventions aimed at enhancing the structural elements of the school community.

d) Outside school factors
Factors beyond the physical confines of the school environment fall under the category of outside school factors. These elements, occurring at societal and community levels, include societal expectations and community support networks. Evaluating the influence of external factors is crucial for comprehending their interaction with other determinants and understanding their role in shaping teacher wellbeing.

These four categories explore different lenses through which teacher wellbeing might be determined and emphasises the wide range of influences which might affect teacher wellbeing. Again, the nuanced nature of wellbeing must be highlighted, in that different determinants might have differential influences on a given teacher's wellbeing and are likely to interact with each other and/or be bidirectional in nature. It is vital that we understand the determinants of teacher wellbeing in order to develop a Teacher Wellbeing Framework, to inform the development and implementation of teacher wellbeing interventions, as these interventions will target these wellbeing determinants in order to improve teacher wellbeing. More detailed explorations of these drivers can be found in the Wellbeing for Schoolteachers report (Taylor et al., 2024).

Teacher Wellbeing Interventions

As outlined above, teacher wellbeing drivers can be categorised into individual-level, role-level, school-level, and outside school-level, each of which has influenced the development of teacher wellbeing interventions. The exploration of wellbeing interventions can be separated into two broad categories: those adopting an individual-level approach, and those adopting a holistic-level approach. Individual-level approaches tend to target specific aspects of wellbeing (e.g., stress management), whereas holistic-level approaches consider broader and systemic changes which could improve wellbeing (e.g. school climate). Due to the paucity of empirical research exploring interventions on teacher wellbeing outcomes, studies which have explored teacher wellbeing-related concepts or drivers as outcomes have been explored in addition.

Individual-Level Interventions

The individual-level teacher wellbeing interventions are centred around the employees as individuals, and subsequently target their perceptions, actions, or behaviours. The empirical evidence explored below pertains to individual-level teacher wellbeing interventions, ranging from mindfulness, to physical exercise, to professional development.

Mindfulness and Positive Psychology

Most of the research pertaining to teacher wellbeing interventions at the individual-level has focused on mindfulness and positive psychology, which targets the development of self-regulatory skills, awareness of one's present state, as well as acceptance of these states (Bishop et al. 2004). Reviews of mindfulness and positive psychology interventions which have been deployed specifically with a teacher population often report that such interventions can improve teacher wellbeing and drivers of teacher wellbeing, as well as provide further benefits pertaining to teacher productivity, student wellbeing, and student performance (Bardach et al., 2022; Hwang et al., 2017; Meiklejohn et al., 2012). In a systematic review conducted by Hwang et al. (2017), it was found that all included studies presented a positive effect of teacher mindfulness interventions on teacher wellbeing measures, with the greatest effect sizes ranging from d=0.89 to d=1.85, indicating a large effect size (Cohen, 1992). However, reviews of existing mindfulness interventions noted that extensive further research is needed in order to develop a more rigorous understanding of the impacts that such interventions have on both staff and students across different cultures and contexts. Here we outline examples of named mindfulness and positive psychology teacher wellbeing interventions for readers to explore.

Stress Management and Relaxation Techniques (SMART) is a mindfulness intervention which involves the teaching and practice of mindfulness techniques. In a study exploring the effects of the SMART 5-week implementation, Benn et al. (2012) found that mean teacher scores significantly decreased in self-reported stress and anxiety, and increased self-reported personal growth, empathy, and forgiveness. Furthermore, Roeser et al. (2013) found that teachers in a randomised group with the SMART intervention reported a significant increase in self-compassion than teachers in a control group following the end of the trial.

Mindfulness-Based Stress Reduction (MBSR) is an intensive mindfulness intervention, whereby teachers weekly attend 2.5-hour sessions over an 8-week period, engage in a silent retreat day, and are encouraged to engage in mindfulness strategies in their own time beyond the expectations of the MBSR intervention (Bonde et al., 2022). Studies have shown that MBSR-based interventions can improve teacher wellbeing, such as through the improvement of factors such as self-compassion, self-regulation, feelings of personal accomplishment, and a reduction in interpersonal conflict (Flook et al., 2013; Frank et al., 2015; Gouda et al., 2016). These three studies were randomised control trials (RCT), which is a methodology through which we can understand the success of an intervention, thus the empirical evidence would suggest that MBSR is a successful intervention in improving teacher wellbeing. Further research has found that in teacher interventions which were framed around the MBSR interventions, such as Mindfulness in Schools Project (MiSP) and Mindfulness-Based Wellness Education, also improved teacher wellbeing (Beshai et al., 2016; Poulin et al., 2008).

Cultivating Awareness and Resilience in Education (CARE) is an intervention programme which trains teachers to improve emotional self-regulation monitoring and encourages mindfulness and compassionate actions. There is some evidence to suggest that CARE has a positive effect on mindfulness (a teacher wellbeing related outcome; significant effect sizes ranging from d=.32 to d=.94), and that 93% of teachers were satisfied with their involvement in the intervention (Jennings et al., 2011). These findings were supported in further studies, with research finding improvements in teacher autonomy, supportive orientation, negative affect, self-efficacy, self-awareness, emotional reactivity, and performance measures following the CARE intervention (Jennings et al., 2013; Schussler et al., 2016).

The Achiever Resilience Curriculum (ARC) intervention, represented by the acronym 'Achiever,' encompasses a range of wellbeing aspects, including mindfulness,

positivity, helping others, thought transformation, physical health, values, social support, and relaxation (Cook et al., 2017). Evidence from an RCT of the effectiveness of the ARC intervention, which involved 5 weeks of 2.5-hour sessions led by the primary researcher and a local doctoral-level school psychologist, found that teachers in the intervention group reported significant reductions in stress, increased self-efficacy, and increased intentions to implement change (effect sizes were: .69, .64, and .77 respectively). However, the sample was limited to American teachers, and had a small sample size of 44, thus further work is needed to increase participant diversity and improve the generalisability of findings. Together, these findings suggest that integrative approaches to wellbeing interventions for teachers is promising, but more work should be done in order to diversify the samples of teachers, so that the findings are more representative.

The Call to Care – Israel for Teachers (C2CIT) is an intervention which is grounded in mindfulness and aims to encourage teachers to develop the skills to better care for themselves, which in turn allows for more sensitive care for others. The C2CIT intervention is described as a professional development intervention, but due to the mindfulness theory which the intervention is based on, it is recorded within this report within the mindfulness and positive psychology section. The C2CIT is delivered across 20 sessions throughout a school year and involves educating and training teachers in skills of meditation and mindfulness. In a pilot study, Tarrasch et al. (2020) found that the C2CIT teachers had significant improvements in mindfulness, self-efficacy, pedagogical practice, classroom management, self-compassion, stress, and interpersonal reactivity, compared to the control group.

Three Good Things (TGT) is a gratitude intervention which has been applied within a teacher context, whereby teachers are asked to record and reflect on 3 positive events or moments that have occurred in the past week (Rahm & Heisse, 2019). An example of TGT is an intervention which lasted 8 weeks led by Chan (2010; 2013) which found that teachers in the gratitude intervention had a significant increase in life satisfaction and gratitude-related emotion and had a significant decrease in negative emotion compare with a control group of teachers. A similar gratitude intervention was conducted and found that teachers reported significant improvements in taking the lead, feedback, extended roles, managing change, and presenting between pre- and post-intervention (Critchley & Gibbs, 2012).

The Inquiry Based Stress Reduction (IBSR) is a cognition-based intervention which aims to identify, challenge, and process negative feelings of stress (Landau et al., 2021). The IBSR intervention has been applied within teacher populations, and in a study with teachers in Israel, Schnaider-Levi et al. (2020) found that the intervention group had a significant improvement in teacher burnout.

Physical Activity Interventions

Physical activity can improve wellbeing through increased blood circulation in brain regions which are associated with stress and emotional reactivity, which might induce engagement in other wellbeing improving behaviours such as social relationship building (Sharma, 2006). In a review of international evidence exploring teachers in educational settings ranging from kindergarten to university, it has been found that physical activity can have a positive effect on multiple domains of teachers' lives, including social, emotional, and physical health (Rosales-Ricardo et al., 2017). Prior to investigating the physical activity interventions available for teacher wellbeing, it is important to note that some teachers have active lifestyles to help manage their own stress, thus existing physical activity might act as a confounding variable within the physical intervention studies (Romano & Whalstrom, 2000).

An example of a named physical activity intervention for teacher wellbeing is Community Approach to Learning Mindfully (CALM), a yoga-based intervention which has been studied within a teacher population. The CALM intervention involves daily meditational and physical yoga strategies and has been found to increase teacher distress tolerance and positive affect (Harris et al., 2016). Furthermore, a yoga-based intervention in the form of a 15-day yoga residential retreat was found to improve teacher wellbeing in a study of difference in pre- and post-intervention measures (Telles et al., 2018). It should be noted that yoga encompasses a variety of skills which are not exclusive to physical activity, but also meditational and self-regulation practices. Further study is needed to determine which particular elements of the practice of yoga contribute to the positive impact it can have on wellbeing, as the practice of yoga encapsulates the development of many different skills such as flexibility, muscle strength, meditation, breathing and etc. (Zarate et al., 2019). School wellbeing interventions which use physical activity as the means of improving wellbeing have often focused on student populations (for details see Zhou et al., 2024). Further research needs to be conducted on the effect of physical activity interventions within teacher populations prior to evidence-based recommendations to be provided.

Professional Development Interventions

Empirical evidence finds that teacher self-efficacy, burnout, and work-related stress are significant determinants of teacher wellbeing (Bardach et al., 2022; Collie et al., 2012; Gray et al., 2017; Puertas Molero et al., 2019; Skaalvik & Skaalvik, 2011). Consequently, teacher wellbeing interventions might target such drivers of teacher wellbeing in order to improve a teacher's ability

to manage their professional roles and responsibilities. Despite the large body of evidence on the importance of strengthening professional skills and the impact this has on wellbeing, limited research has been conducted on teacher professional development programme influencing teacher wellbeing outcomes (Cheon et al., 2018; Corbett et al., 2022).

An example of a specific professional development intervention which has measured teacher wellbeing is the implementation of social interaction skill training service, called Teacher Effectiveness Training (TET), which aims to develop teachers' skillset in creating an emotionally supportive environment and classroom. The TET is an intervention which supports teachers in how to improve communication, teacher-student relationships, and managing conflict resolution (Gordon & Burch, 2003). A study conducted by Talvio et al. (2015) found that the TET teachers in comparison to the control group engaged in significantly more listening, active listening, and self-oriented 'I-messages'. Furthermore, TET teachers, in comparison to the control group, engaged in significantly fewer negative messaging or 'road blocks'. Other professional development interventions have also found that teachers can find such interventions to be beneficial, even if they do not have an impact on wellbeing. For example, teachers who took part in a Teacher Classroom Management (TCM) programme reported feeling that the intervention helped improve their pedagogical practice, despite not finding a statistically significant impact on teacher wellbeing outcomes (Hayes et al., 2020).

The field of professional development teacher wellbeing interventions has been critiqued as not being academically rigorous enough in order to determine the effectiveness of the interventions to be calculated (Corbett et al., 2022). Given the significant impact of self-efficacy on teacher wellbeing, there is a need for further research into the effect of professional development programme on teacher wellbeing.

Holistic-Level Interventions

Holistic interventions are understood within this report as 'organisational' and 'whole-school' approaches, and have been explored in greater depth in the companion Wellbeing for Schoolteachers report (Taylor et al., 2024). Broadly, holistic-level interventions are interventions which target higher-level decision making and work beyond an individual-level approach. It is important to understand the interactive nature of factors which can drive teacher wellbeing, and how intricate such relationships between the factors can be. A distinction is made between organisational approach interventions and whole-school approach interventions, whereby organisational approaches pertain to systemic and institutional decision making, and whole-school approach is one which encourages the democratisation of wellbeing interventions and the implementation of intervention throughout the school body.

Organisational Approach Interventions

Organisational approach interventions relate to systemic, institutional decisions and processes, which influence the teaching role. Within the context of teacher wellbeing interventions, organisational approach interventions might involve the targeting of national curriculums, teaching staff contractual obligations, and workplace expectations (Naghieh et al., 2015; Newman & Beehr, 1979). Within the current literature, there are few intervention studies which explore the effectiveness of organisational level wellbeing interventions, and even fewer that measured teacher wellbeing as an outcome (Nagieh et al., 2015). Educational researchers have found that organisational design influences teacher wellbeing, as evidence has shown that constrained work environments can increase pressure and stress for teachers, leading to poorer wellbeing (Collie et al., 2012; Corbett et al., 2022; Corrente et al., 2022; García-Carmona et al., 2019; Von der Embse et al., 2019). Furthermore, rapid changes to global educational systems have led to an increase in the prescriptive and bureaucratic nature of curricula, which puts further pressure onto teacher professionalism and questions their agency within their own classrooms (Beck & Young, 2005; Jennings & Greenberg, 2009; Samier, 2002). Research has recognised that such pressures on teacher autonomy can be emotionally distressing for teachers to experience (Ball, 2003; Gloria et al., 2013; Hobson & Maxwell, 2017; Koretz, 2009). However, further study into organisational approach teacher wellbeing interventions must be conducted.

Whole School Approach Interventions

The whole-school approach (WSA) in relation to teacher wellbeing interventions considers how the school physical environment, the school culture and organisation, as well as the integration of government-led policies, all act to influence the wellbeing of teachers and those within the school community (Lester et al., 2020). The WSA emphasises inclusivity and democracy, so that all members of the school community feel a sense of belonging and cohesion (Rowe & Stewart, 2009). A WSA might take different frameworks and adapt them in order to best suit the needs of the school.

For example, the School-Wide Positive Behavioral Intervention (SWPB) is an intervention which targets the development of intrapersonal and interpersonal team skills with school staff, allowing for the development of productive and efficient pedagogy, to aid the interactions which occur within a school context. The SWPB intervention has been found to improve teacher wellbeing, and this was achieved through improving opportunities for positive experiences of cooperation between staff and students (Ross et al., 2012). Interestingly, Ross et al. (2012)

found that SWPB intervention rollout in schools with a lower socioeconomic status improves teacher wellbeing more so than in affluent schools. The results suggest that differences in school context can influence the efficacy of a given intervention, and that different approaches might be suitable in different contexts.

Another WSA which has been explored by researchers is the resilience-enhancing programme rolled out through the Health Promoting Schools (HPS) initiative in Hong Kong (Wong et al., 2009). The HPS initiative aims to educate and train both teachers and parents in how to encourage resilience and wellbeing in children. The WSA is supported within this HPS intervention as teachers and parents are both actively involved in understanding and promoting wellbeing related skills within their interactions with their children and student respectively. It is this involvement of the broader school community which makes such an intervention a WSA. It is interesting to note that all participating teachers and parents reported that they felt that this collaborative approach to a resilience intervention was an effective approach (Wong et al., 2009). With regards to teacher outcomes, Wong et al. (2009) found that the teachers within HPS secondary school institutions had statistically significant improvements in resilience and social environment, in comparison to control schools. This reinforces the argument that we must be conscious of school and pedagogical contexts and the potential differential impacts this can have on different stakeholders (e.g. on students and teachers). In addition, the 4 Pillars of Wellbeing (4PW) intervention can be understood as a WSA, as it is an intervention which targets class climate and the experiences of both the teachers and the students (Bradley et al., 2018). The 4PW consists of 15 lessons grounded in positive psychology which are delivered by teachers, and has been found lead to significant improvements in contentment, self-compassion, and self-efficacy, but no difference was found in job satisfaction, burnout, perceived stress, relationship satisfaction and psychological wellbeing in this US sample (Bradley et al., 2018).

Though WSA have been well explored and evaluated in the existing wellbeing literature, there remains a critical gap within the existing literature whereby teacher wellbeing outcomes are often not measured (Adi et al., 2007; Goldberg et al., 2019; for review, please see Zhou et al., 2024). The study of WSA interventions and their effects on teacher wellbeing should be encouraged, particularly as much of the literature within the field of school wellbeing states that approaches which target school environment and multiple facets of school life (curriculum, pedagogy, physical environment) are most effective in bringing about a positive change (Adi et al., 2007; Goldberg et al., 2019). Such an integrative and collaborative approach to the implementation of an intervention has also been recognized as important in allowing for a sustainable change in school wellbeing to be brought about (Corrente et al., 2022; Gray et al., 2017; Kyriacou, 2001; Puertas Molero et al., 2019).

Examples of Teacher Wellbeing Interventions

We have synthesised examples of distinct, named teacher wellbeing interventions which have been empirically studied, and laid clear the characteristics of such interventions. Within the existing body of teacher wellbeing intervention literature, the following studies have been identified as interventions of note, because of the transparency of the design of the interventions, as well as the study methodology. This section outlines different empirical studies of named wellbeing interventions, which might serve as a starting point for school stakeholders to explore teacher wellbeing interventions that might be of interest in their setting.

In the table below, we note that the majority of the intervention settings identified here are conducted in the US. This follows the trend within social science research whereby research is mostly conducted in Western, Educated, Industrialised, Rich, and Democratic (WEIRD) contexts (Henrich et al., 2010). It is vital that we as readers of research remain cognizant of the societal and cultural nuances which might be reflected in research findings, thus limiting the generalisability of findings to other contexts. For example, whereby a gratitude intervention was found to be successful in improving teacher outcomes in Hong Kong (Chan, 2010; 2013), such an intervention might not illicit the same effect in other cultural contexts whereby gratitude might not be as traditional a virtue within society. In addition, the mindfulness interventions highlighted below which have been conducted in the US might produce a stronger effect on teacher outcomes than if the mindfulness interventions had been conducted in contexts whereby the practice of mindfulness is of cultural and spiritual importance and already practiced regularly. As we have emphasised throughout this report, it is vital that schools recognise the nuances and characteristics of their own school setting, and critically engage with the evidence presented here in order to judge which types of teacher wellbeing intervention might be most appropriate for their own teachers. This re-emphasises the value of a bottom-up approach whereby school stakeholders are involved in the decision making of intervention implementation.

The table we present below is not an exhaustive list of recommended teacher wellbeing interventions, and is rather a resource which schools stakeholders can use as a starting point, or expansion, to their understanding the breadth of teacher wellbeing interventions which have been explored and the elements that were studied.

Levels of Evidence

Below, we describe the various levels of scientific evidence and how we have ascertained the quality of the studies we include in the tables below (adapted the Joanna Briggs Institute, 2013; 2014; LoBiondo-Wood & Haber, 2022).

- Systematic Reviews and Meta-Analyses (Level 1): These are comprehensive reviews of the literature that synthesise the findings of multiple primary studies. In a systematic review, researchers typically assess the quality of each study included and assign a level of evidence based on the study design, sample size, potential biases, and other relevant factors. They then use this hierarchy of evidence to draw conclusions and make recommendations. In a meta-analysis they also gather the original data from the selected studies and conduct new analyses to understand more than what can be learned from one primary study.

- Randomised Controlled Trials (Level 2): These are experimental studies where people are randomly assigned to groups (e.g., treatment and control) by chance to see if an intervention has an effect on the group (or groups) that receive it (compared with the group that does not).

- Quasi-experimental Studies (Level 3): Quasi-experimental studies are research designs that share similarities with experimental studies but do not involve random assignment of participants to groups. They aim to investigate cause-and-effect relationships but often lack the complete control of variables seen in randomised controlled trials (RCTs).

- Observational – Analytic Designs (Level 4): These studies are designed to provide evidence that helps establish cause-and-effect relationships or identify associations. To conduct analytic observational studies, researchers typically employ various study designs, including cohort studies, case-control studies, and cross-sectional studies.

- Meta-synthesis (Level 5): Meta-synthesis is a research method used to synthesise and analyse findings from multiple qualitative studies. It involves systematically reviewing and integrating qualitative data from various sources to generate new interpretations or insights.

- Qualitative Studies (Level 6): Qualitative studies focus on exploring and understanding the experiences, perceptions, and meaning-making processes of individuals or groups. They often involve in-depth interviews, focus groups, or content analysis to capture the nuances and context of a phenomenon.

- Expert Opinions (Level 7): Expert opinions are typically reports or recommendations provided by panels of experts or professional organisations. They are not based on empirical research but rather on the collective knowledge and expertise of recognised authorities in a specific field. These opinions are valuable for providing guidance, consensus statements, or expert advice based on their experience and expertise.

In addition, we consider several other factors when evaluating research and interventions: including sample size, the characteristics of the study population, methodology, reliability, and validity. These elements are crucial in determining the strength and relevance of the evidence. Larger sample sizes often lead to more robust findings, increasing the potential for broader applicability. However, smaller sample sizes can still provide valuable insights, particularly when studying specific or niche populations. The characteristics of the study population are also vital considerations, as research outcomes may vary based on participant diversity. Methodology must be considered in terms of realism vs control and what can be reasonably achieved given the constraints such as ethics, resources, scientific rigor, and practicality. Moreover, reliability and validity are of utmost importance. Reliable research designs ensure consistent reproducibility of results, while validity ensures that the study accurately measures what it aims to. Therefore, a research design that is both reliable and valid is essential for rigorous research. For further information on research methods, we recommend referring to the book 'Research Methods in Education' (Cohen et al., 2018).

In delineating the various levels of evidence, it's imperative to emphasise that the prominence of interventions validated through RCTs does not diminish the value of interventions validated through qualitative studies. Rather, it underscores that certain interventions may be more amenable to rigorous scientific investigation due to the nature of their design, or the cost associated with conducting RCTs. It's essential to recognise that interventions established through qualitative research hold unique significance and may prove to be indispensable in specific educational settings.

TABLE 1: EXAMPLES OF TEACHER WELLBEING INTERVENTIONS

Theme	Intervention	Age/Setting	Content	Results	Evidence Level
Mindfulness and Positive Psychology	SMART	K-12 Elementary and secondary Canada and US *n*= 113	11 sessions over eight weeks, 10-30 minutes of daily mindfulness practice The SMART programme aims to encourage teachers to increase awareness of their own bodily state, focused attention, emotion to oneself and to others, and to develop the skills to regulate such experiences. The SMART programme is delivered through five components: 1) Mindfulness and yoga sessions 2) Group discussions 3) Group activities 4) Lectures/guided mindfulness 5) Homework	98% of participating teachers reported that they would recommend SMART to vocational peers Teachers who engaged in SMART showed improved: occupational self-compassion, mindfulness, cognitive ability (working memory) Teachers who engaged in SMART showed reduced: occupational stress, burnout, symptoms of stress and anxiety, and cortisol levels	RCT (waitlist-control) (Roeser et al., 2013) The effect sizes for teachers' mindfulness, self-compassion, stress, and burnout reduction at post-programme and follow-up were large, with d ranging from -1.56 to 0.87.
		Special Education (age 5-19) US *n*= 60	36 hours over 9 x 2.5-hour sessions, and two full days The SMART programme aims to encourage teachers to increase awareness of their own bodily state, focused attention, emotion to oneself and to others, and to develop the skills to regulate such experiences. The SMART programme is delivered through five components: 1) Mindfulness and yoga sessions 2) Group discussions 3) Group activities	The participants (teachers and parents) who engaged in SMART showed improved: stress levels, personal growth, positive affect, mindfulness, empathic concern, self-compassion, anxiety, and depression The teachers who engaged in SMART showed improved: emotional self-regulation, and pedagogical self-efficacy	RCT (Benn et al., 2012) Medium-to-large effect sizes, ranging from -0.79 to 0.74, were found on mindfulness, negative affect and positive affect (wellbeing), personal growth, and self-compassion at post and follow-up.

		4) Lectures/guided mindfulness 5) Homework		
CARE	Elementary school (including specialist educators i.e. learning support, special education etc.) US High poverty neighborhoods *n*= 31	The CARE intervention is a teacher professional development programme, which aims to support teacher wellbeing and reduce experienced distress. The CARE intervention has three thematic components: 1) Emotion skills instruction 2) Mindfulness/stress reduction practices 3) Compassion practices This professional development programme was delivered through a two-day weekend workshop, a two-week intersession period with phone coaching, a one-day workshop, another two-week intersession with phone coaching, and finally a one-day workshop.	Teachers who engaged in CARE showed non-significant improvements in: self-efficacy, positive and negative affect, depressive and physical symptoms, and mindfulness Teachers reported feeling very satisfied with CARE, and reported that they felt improvements pertaining to: emotional regulation, interactions and relationships with students and colleagues, understanding of one's own emotional state, and ability to resolve conflicts	Pilot (Jennings et al., 2011) The effect size is not available.
	K-12 US *n*= 50	The same CARE intervention schedule as Jennings et al. (2011), though this study also included a one-day booster workshop one month after the end of the CARE study took place.	Teachers who engaged in CARE showed improvements in: reappraisal, physical symptoms, self-efficacy, time pressure, observing mindfulness, and emotional reactivity	RCT (waitlist control) (Jennings et al., 2013) CARE had significant effects on teachers' general well-being, efficacy, burnout/time pressure, and mindfulness, with effect sizes ranging from -0.45 to -0.8.

	MBSR	Private and municipal schools Denmark *n*= 191	The MBSR programme consisted of four components: 1) Delivery of eight weekly 2.5-hour sessions by an MBSR teacher 2) A seven-hour silent retreat day 3) Teachers were then advised to practice mindfulness for 60 minutes each day, for six days a week A follow up teacher training session delivered six months after the initial intervention.	Teachers who engaged MBSR showed improved: wellbeing, stress, mindfulness, comfort, and bodily awareness	Parallel cluster-RCT (waitlist control) (Bonde et al., 2022) Effect sizes of MBSR found in this study on general wellbeing ranged from 0.21 to 0.29, indicating a small effect.
		Trainee teachers Setting unclear *n*= 28	This intervention, titled Mindfulness-Based Wellness Education (MBWE), was developed from the MBSR intervention, and consists of two components: 1) Delivery of eight weeks of mindfulness training, as well as health and wellness education 2) Teachers were advised to spend 15-20 minutes following a mindfulness CD and wellness workbook for five days a week	Teachers who engaged in MBWE had improved: mindfulness, life satisfaction, and health	Non-randomised control (Poulin et al., 2008) A moderate effect size was observed for the Emotional Exhaustion subscale, while a large effect size was noted for wellbeing, measured by the Satisfaction with Life Scale.
		Secondary	The MiSP intervention involved	Teachers who engaged in the MiSP	Non-randomised pilot

		school England *n*= 89	the following components, and was grounded in MBSR principles: 1) Nine mindfulness training sessions 2) Teachers were advised to practice 10-40 minutes of mindfulness at home, six days a week	intervention were found to have improved: wellbeing, self-compassion, and mindfulness	(Beshai et al., 2016) There were large effects observed for the intervention on stress, wellbeing, mindfulness, and self-compassion.
	ARC	Secondary school US *n*= 645	The ARC intervention involved weekly 2.5-hour sessions delivered online, over a period of five weeks. The ARC intervention is based on the theories of cognitive behaviour therapy, acceptance and commitment therapy, as well as positive psychology. Each session followed the same 'Know, See, Do' format: 1) *Know*: Taught knowledge regarding resilience 2) *See*: Through a video demonstration, the resilience skills are modelled 3) *Do*: Teachers encouraged to practice the resilience skill they have learned	Teachers who engaged in the ARC intervention were found to have improved: stress, teacher self-efficacy, job satisfaction, intention to implement Teachers within the ARC intervention group found the intervention to be: effective, acceptable, and reasonable All ARC teachers expressed a desire to continue the practices learned within the intervention	Randomised block-controlled design (pre-test – post-test) (Cook et al., 2017) Large effects were found (0.64-0.77) on stress and self-efficacy
	TGT	Hong Kong *n*= 78	The gratitude intervention involved 8 weeks of project work, whereby teachers were asked to log 3 good things/events that occurred in the	Teachers in the gratitude intervention had a significant increase in life satisfaction and gratitude-related emotion	RCT (Chan, 2013)

			past week, and to reflect on these moments.	Teachers in the gratitude intervention had a significant decrease in negative emotion	Effect size statistics revealed the MBCT group had small to moderate effects (d = 0.25 to 0.56) on depression, anxiety, stress, self-efficacy, and health.
Physical exercise	CALM	Middle school US *n*= 64	The CALM programme consisted of 64 intervention sessions, 20-minutes per session, for our days a week across 16 weeks. The schedule was as follows: 1) Three minutes of centring and setting an intention for the practice 2) Two minutes of breathing practices 3) 7–10 min of movement/ posture practice 4) Revisiting the breathing practice 5) Four minutes of a relaxation/ meditation practice 6) One minute closing practice involving setting an intention for the workday	Teachers who engaged with the CALM intervention were found to have improved: classroom management efficacy, time urgency, depersonalisation, physical symptoms, blood pressure, and cortisol level	Experimental waitlist control design (Harris et al., 2016) Small to moderate effect sizes were found on measures of mindfulness, emotional regulation, and emotion.
	Yoga	Primary school India *n*= 236	This yoga intervention involved a 15-day residential trip, with the programme consisting of two components: 1) Two, two-hour yoga sessions each day	Teachers who engaged in this yoga intervention were found to have improvement in both state anxiety and mental wellbeing	Comparative, controlled trial (Telles et al., 2018)

			2) Daily two-hour yoga theory classes		Small to moderate effect sizes (0.18-0.42) were found for mental wellbeing and anxiety.
Professional development	TET	Comprehensive school Finland *n*= 44	The TET intervention involved five afternoon sessions across a period of two weeks, including: lectures, small group work, self-study, demonstrations, and learning diary exercises. The TET intervention targeted the development of skills to bolster interactions between teachers and students.	Teachers who engaged in TET were found to have significantly improved: listening, active listening, and self-oriented/ 'I-messages' Teachers who engaged in TET were found to have significantly fewer negative messaging/ 'road blocks'.	Quasi-experimental pre-post-test (Talvio et al., 2015) Effect size is not reported.
	TCM	Primary school UK *n*= 80	The TCM intervention involved six day-workshops across six months. The TCM workshop involves group training sessions, with each session covering the following topics: 1) Building positive teacher-student relationships 2) Pedagogical praise/ engagement 3) Motivating students 4) Reducing inappropriate behaviours 5) Reducing inappropriate behaviours-follow up 6) Emotional regulation	Teachers who engaged in TCM reported that they felt the intervention improved their pedagogical practice and encouraged positive behaviour cycles	RCT (Hayes et al., 2020) Effect size is not reported.

Whole school approach	SWPBIS	Elementary school US *n*= 200	SWPBIS is an intervention which is highly adaptable to the needs of the students, and varies in intensity based on the severity of the targeted behaviour of the students. Within SWPBIS, teachers are encouraged to work together as a team, in order to collaborate in their pedagogical practice, as well as encouraging interpersonal relationships.	Findings suggest that SWPBIS can predict improved teacher: self-efficacy, emotional exhaustion, and personal accomplishment	Pre- and post-test (Ross et al., 2012) Effect size is not reported.
	HPS	Primary and secondary school Hong Kong *n*= 4918 parents *n*= 602 teachers	The HPS resilience intervention programme aims to improve both teachers and parents, in order to. It is to be implemented over four months, consisting of two components: 1) Two-hour discussion at the start of the intervention 2) Workshops which are led by a social worker	Findings indicated that HPS intervention parents improved their perceptions of school goals and objectives Findings indicated that HPS intervention teachers improved outcomes	Quasi-experimental control (Wong et al., 2009) Effect size is not reported.

Recommendations

It is important to note that the majority of the interventions listed above, despite their empirical foundation, were conducted within a single setting involves relatively small sample sizes. This focus on one specific context reduces the diversity in theoretical and empirical approaches, compounded by the presence of cultural nuances, resulting in significant heterogeneity among the empirical research (Hascher & Waber, 2021). As a result, this makes it difficult to draw conclusions about their effectiveness across diverse populations and contexts. Thus, it's essential to recognise that there isn't a one-size-fits-all or universal intervention for all educational settings. As highlighted previously, each school is a unique ecosystem and what works in one setting may not translate to another. Additionally, majority of the studies focus on identifying drivers that negatively impact teacher wellbeing, rather than targeting wellbeing itself. More large-scale, longitudinal research is needed that directly assesses various interventions tailored to improve teacher wellbeing across different contexts.

Given this complexity, the effectiveness and suitability of teacher wellbeing interventions are inevitably intertwined with specific circumstances, societal dynamics, and cultural nuances. Therefore, a critical consideration of any implementation strategy should involve the unique working conditions, societal factors, and cultural sensibilities that prevail within each school environment. By acknowledging and accounting for these variances, schools can ensure that their efforts to improve teacher wellbeing are tailored, relevant, and ultimately more effective in promoting positive outcomes across diverse contexts.

Luckily, meta-analysis studies acknowledge the array of interventions that have been undertaken, delving into the shared components among these interventions holds the potential to inform a general effective design. A systematic review of school-based positive psychology interventions conducted by Vo and Allen (2022) identified a set of six fundamental core elements that consistently emerged across interventions in improving teacher wellbeing. These elements collectively play a pivotal role in not only fostering the successful execution of interventions but also in increasing the overall wellbeing of teachers.

- **Promoting Autonomy (Voluntary Participation and Multiple Methods):** Two recurring themes across the reviewed interventions were the emphasis on providing teachers with the autonomy to choose their level of participation, and the ability to use multiple methods. Allowing teachers to choose their participation with an intervention taps into their intrinsic motivation for growth and autonomy, which plays a significant role in fostering wellbeing. Moreover, the presence of 'multiple methods' offers teachers the flexibility to select the most suitable tool or strategy for their needs. The ability to customise interventions to align with personal preferences and requirements ensures that teachers are more likely to engage actively and find resonance with the chosen strategies. Extensive research has demonstrated that choice or autonomy is critical in promoting intrinsic motivation and engagement (Evans & Boucher, 2015). This autonomy not only aligns with theories of motivation but also empowers teachers by giving them a say in their own wellbeing journey.

- **Context-Specific Design:** Most of the reviewed interventions were tailored to meet the specific needs and circumstances of teachers and schools. This personalised approach underscores the significance of relevance in improving the effectiveness of interventions. Specifically, learners are more interested to acquire concepts and skills that are pertinent and applicable to their lives (Sebba at al., 2007). Designing interventions to match specific contexts adapts them to teachers' distinct needs and situations, thereby enhancing their motivation to acquire wellbeing-supporting skills. Individual schools could consider the unique challenges and wellbeing needs of teachers within the school, taking into account factors such as school culture, student demographics, and available resources.

- **Group Format:** Another important element to teacher wellbeing interventions was a group format in the intervention design. This approach encourages connections among teachers, and corresponds with wellbeing theories, as the group dynamic fosters shared experiences, mutual support, a sense of belonging, and positive relationships – all factors contributing to heightened wellbeing.

- **Professional Knowledge:** The majority of interventions were overseen by skilled professional instructors, who brought theoretical and experiential understanding to the table. The involvement of these professional instructors is likely to have positively impacted the outcomes of the interventions, enhancing their overall effectiveness. This is particularly evident in mindfulness-based programmes, where the expertise of professional instructors plays a pivotal role in ensuring high-quality and impactful interventions (Hwang et al., 2019).

- **Regular Meetings:** Weekly meetings were a constant element across the interventions, regardless of their duration. These regular sessions reinforced learning, fortified relationships between participants and instructors, and enabled participants to engage consistently in wellbeing practices.

Aligned with the highlighted emphasis on group formats prevalent in effective teacher wellbeing interventions, a comprehensive systematic review encompassing 98 studies also underscores the crucial role of **social relations** in enhancing teacher wellbeing (Hascher & Waber, 2021). This remains true despite the wide array of conducted countries and chosen measurements, illustrating the significance and foundational of social connections in improving teacher wellbeing. This result is hardly surprising, given the extensive body of research indicating the positive correlation between teacher wellbeing and factors such as social support, teacher-student relationships, and overall school climate (see Taylor et al., 2022 for further details). Furthermore, this emphasis on social connectedness is rooted in the broader realm of wellbeing, as evidenced by the fundamental role of social relatedness outlined by Ryan and Deci (2000). Consequently, the enhancement of social relationships emerges as a crucial consideration for schools when selecting interventions, particularly as this systematic review assesses its relevance across diverse cultural contexts.

Mindfulness-based interventions stand out as one of the most extensively examined approaches in the realm of teacher wellbeing interventions. The synthesis explored here of quantitative studies underscores its potential in diminishing stress, burnout, depression, and anxiety levels among teachers as well as concurrently improving psychological wellbeing and reducing psychological distress. On the qualitative side, the review reveals that as teachers enhance their ability to tactically handle stress and challenging emotions, they exhibit an amplified attunement to students' needs, accompanied by increased compassion for others and themselves (e.g., Hwang et al., 2017). Thus, a meta-analysis study encouraged schools interested in addressing these teacher outcomes should consider adopting mindfulness-based interventions (Hwang et al., 2017). However, it's crucial to acknowledge that while mindfulness-based interventions are progressively gaining recognition as an evidence-based practice in education, they are still a work in progress (Klingbeil & Renshaw, 2018). The mechanism by which specific intervention components actively impact to the reported outcomes remains uncertain. Therefore, schools which consider mindfulness-based interventions should adopt a holistic viewpoint, taking into account both the promising results and the ongoing development of evidence.

It is also noteworthy that certain interventions, originally designed to provide behavioural support for students, such as initiatives like SWPBIS, have the potential to extend their positive influence on teachers' wellbeing. SWPBIS incorporates opportunities for teachers to foster constructive interactions with their students (Ross et al., 2012). By addressing students' challenging behaviours, SWPBIS mitigates potential stressors encountered by teachers, potentially enhancing their sense of self-efficacy. Furthermore, the author also recommended considering SWPBIS for schools situated in economically disadvantaged areas across the country, as the outcomes indicate that teachers' wellbeing in schools with lower socioeconomic status might derive the most benefit from SWPBIS implementation. Overall, with the goal of enhancing teacher wellbeing, schools may want to consider more than just targeted wellbeing interventions. The whole school approach report (Zhou et al., 2024) delves into this subject in me detail and explores how wellbeing can be enhanced at the school level, involving all members of the school community.

Measurement

Wellbeing is conceptualised within these reports through three key areas of subjective wellbeing (life satisfaction; eudaimonia; and affect). As a consequence of the subjective nature of wellbeing, many measurement instruments exist within the literature which attempt to be able to capture the essence of wellbeing (Linton et al., 2016). A thorough examination of teacher wellbeing measures has been outlined in the Wellbeing for schoolteachers Report (Taylor et al., 2024). It is useful to consider measurements used in international data collection when deciding upon which measurements to use in one's own school, as these measurements have been subject to inspection of validity, reliability, and scalability across large samples (Benson et al., 2019; Levin & Currie, 2014; OECD, 2019; PISA, 2019). The tables below highlight the variety of wellbeing measurements which have often been included in the analysis of the wellbeing of teacher populations.

TABLE 2: EXAMPLES OF ADULT WELLBEING MEASURES

Measure	Language Validation	Availability
The Satisfaction with Life Scale Diener et al. (1985)	English, French, Spanish	Freely available for commercial and/or research use.
Cantril Ladder	English, French, Spanish	Freely available for commercial and/or research use.
Office for National Statistics (ONS-4)	English	Freely available for commercial and/or research use.
Positive and Negative Affect Schedule (PANAS)	English, French, Spanish	Freely available for commercial and/or research use.
Psychological Well Being (PWB) Ryff (1989)	English, French, Spanish	Freely available for commercial and/or research use.
Flourishing Scale Diener et al. (2010)	English, French, Spanish	Freely available for commercial and/or research use.
PERMA Profiler Seligman (2011), Butler & Kern (2016)	English, French, Spanish	Freely available for commercial and/or research use.

TABLE 3: EXAMPLES OF OCCUPATIONAL WELLBEING MEASURES

Measure	Language Validation	Availability
Warr's Scale of Job Related Affective Wellbeing Warr (1990)	English	Not available for commercial and/ or research use.
The Job Satisfaction Survey (JSS) Spector (1985)	English, French, Spanish	Freely available for commercial and/or research use.
Job Affective Related Wellbeing Scale (JAWS) van Katwyk et al. (2000)	English, Spanish	Freely available for commercial and/or research use.
Satisfaction with Work Scale (SWWS) Blais et al. (1991), Bérubé et al. (2007)	English, French	Not available for commercial and/ or research use.

Frequently Used Measurements

Here, this report will outline measurements often used to understand teacher wellbeing, and the different measurements which have been employed in understanding the experiences of those within the teaching profession. There is not a global, standardised measure of teacher wellbeing which is used across all teacher wellbeing intervention studies, which is why we here present a variety of some of the most frequently administered measures in the exploration of teacher wellbeing. The table presented below includes measurements from general adult wellbeing, occupational wellbeing, as well as teacher-specific measures.

TABLE 4: FREQUENTLY USED QUESTIONNAIRES

Self-report Questionnaire	Content	Age	Reliability	Language Validation	Availability
Centre for Epidemiologic Studies Depression (CES-D)	20-item scale, asking respondents how often they have felt or behaved each of the items in the past week (scored from 0-3). The maximum score is 60, with the higher the score indicating the respondent being more symptomatic of depression.	Adults (child version for ages 6-23 available)	Reliability considered to be satisfactory (Cronbach's alpha value = 0.83 - 0.93) (Yang et al., 2015)	English French Spanish	Freely available for commercial and/or research use.
Positive and Negative Affect Schedule (PANAS)	20-item scale, asking respondents how often they have felt each item in the past week (scored from 1-5). The maximum score for positive affect is 50, and the maximum score for negative affect is 50.	Adults (child version for ages 7-14 available)	Reliability considered to be satisfactory (Cronbach's alpha value = 0.84 - 0.90) (Watson et al., 1988)	English French Spanish	Freely available for commercial and/or research use.
Perceived Stress Scale (PSS)	10-item scale, asking respondents how often they have felt each item in the past month (scored from 0-4). The maximum score is 40, with higher scores indicating higher perceived stress.	Young people and adults (age 12 and above)	Reliability considered to be satisfactory (Cronbach's alpha value = 0.85 - 0.89) (Cohen et al., 1983; Crawford & Henry, 2004)	English French Spanish	Freely available for commercial and/or research use.
Teacher Self Efficacy Scale (TSES)	24-item scale, asking respondents how much they feel they are able to relate to each item (scored from 1-9). There are three subscales within TSES, measuring: Efficacy in Student Engagement, Efficacy in Instructional Strategies, and Efficacy in Classroom Management.	Adults	Reliability considered to be satisfactory (Cronbach's alpha value = 0.87 - 0.94) (Tschannen-Moran & Hoy, 2001)	English French Spanish	Freely available for commercial and/or research use.

Neff Self-Compassion Scale (NSCS)	26-item scale asking respondents how often they relate to the item in how they act towards themselves in difficult times (scored from 1-5). Higher scores in the self-judgment, isolation and over-identification scales indicate less self-compassion before reverse-coding, and more self-compassion after reverse coding.	Young people and adults (age 14 and above)	Reliability considered to be satisfactory (Cronbach's alpha value = 0.91 - 0.98) (Huang et al., 2022)	English French Spanish	Freely available for commercial and/or research use.
Maslach Burnout Inventory (*-Educators Survey*) (MBI-(*ES*))	22-item scale, asking respondents to rate from 0-6 the frequency with which they experience each of the items. The MBI measures three subscales: occupational exhaustion, depersonalisation, and personal accomplishment.	Adult (student version available)	Reliability considered to be satisfactory (Cronbach's alpha value = 0.71 - 0.88) (Aguayo et al., 2011; Maslach et al., 1996; Maslach et al., 1997)	English French Spanish	Freely available for commercial and/or research use.
Five Facet of Mindfulness Questionnaire (FFMQ)	39-item scale asking respondents to rate from 1-5 how true they believe each item to be for them. The FFMQ measures 5 subscales: observing, describing, acting and awareness, nonjudging, and nonreactivity.	Young people and adults (age 16 and above)	Reliability considered to be satisfactory (Cronbach's alpha value = 0.82 - 0.93) (Shallcross et al., 2020)	English French Spanish	Freely available for commercial and/or research use.
Warwick Edinburgh Mental Wellbeing Scale (WEMWBS)	14-item scale, asking respondents to rate from 1-5 how often they have experienced each item over the last two weeks. A higher score is indicative of better wellbeing.	Young people and adults (age 16 and above)	Reliability considered to be high (Cronbach's alpha value = 0.89 – 0.91) (Tennant et al., 2007)	English French Spanish	Available for commercial and/ or research use, under license.

Office for National Statistics (ONS 4)	Four-item scale asking respondents to rate from 0-10 how they feel in response to each item. Each item measures one of the following: life satisfaction, happiness, anxiety, and worthwhileness.	Children and adults (age 10 and above)	Reliability considered to be high (Cronbach's alpha value = 0.90) (Benson et al., 2019)	English	Freely available for commercial and/or research use.
World Health Organizational Wellbeing Scale (WHO-5)	Five-item scale asking respondents to rate from 0-5 how often they identified with each item within the last two weeks. A higher score is indicative of better wellbeing.	Children and adults (age 9 and above)	Reliability considered to be high (Cronbach's alpha value = 0.858) (Omani-Samani et al., 2019; WHO, 1998)	English French Spanish	Freely available for commercial and/or research use.

Behavioural Manifestations of Wellbeing

An example of a behavioural manifestation of teacher wellbeing can be understood through job retention (teachers deciding to stay in their role). Teacher retention rates can also be understood as an indicator of teacher wellbeing, as teachers who are unhappy, stressed, and overworked might decide to leave their teaching position (Ofsted, 2019). Research has also found that worker wellbeing heavily influences job attrition, and whether or not an individual might decide to choose an alternative occupation (Krekel et al., 2018; Liu, 2021; Scanlan & Still, 2019). Research has also found that within the workplace today, employee-rated workplace wellbeing is strongly and positively related to company performance (De Neve et al., 2023), suggesting that those who are happier at work also generate better outcomes for the organisation. Teacher retention as a measure of teacher wellbeing was used as a viable measure in the Glazerman (2012) study, which involved data which spanned 4 years, thus differences in yearly teacher retention rates could be analysed. However, it is noted in the literature that many factors might influence teacher retention and the decision-making process leading to an ultimate decision (Cochran-Smith, 2004; Glazerman, 2012). When interpreting such data, school stakeholders may want to consider how local contextual factors like school leadership, organisational culture, and community dynamics may intersect with retention rates in their own settings. Critically examining the nuances behind retention data can help schools gain valuable insights into teachers' wellbeing and inform supportive policies.

Recommendations

In order to allow for direct comparability of findings, using the same measurements across different studies is required. This is particularly the case in the field of wellbeing science, as wellbeing can be understood through many different lenses. Though this report understands wellbeing as 'subjective wellbeing' (life satisfaction; eudaimonia; and affect), there are many ways through which this can be measured from various theoretical interpretations of wellbeing (Linton et al., 2016). The listed measurements provided offer school stakeholders a diverse range of choices which they could pick based on their priorities. For example, in recognition of the unique combination of expectations and stressors each teacher might face, the use of teacher-specific wellbeing measurement instruments might be a more appropriate measurement, as opposed to a measure of adult wellbeing more widely. In the frequently used measurements explored in the intervention studies within this report, the TSES and MBI-ES were two teacher-specific measurements which were often used.

When selecting measurements for school wellbeing, educational institutions should also take into account factors such as:

- The appropriateness and validity of potential measurement tools for their specific teacher population. Assessments should be more tailored and scaled for the given context.
- Alignment of the measurement constructs with the institution's wellbeing related goals and focus areas. Selected tools should capture the desired outcomes and indicators.
- Feasibility of data collection and analysis. The process should not disrupt school activities or overly burden teachers.
- Relevance for all members of the school community, including students, staff, and families. A comprehensive lens acknowledges the interrelated nature of wellbeing.
- Specific contextual conditions and needs unique to the schools that may influence the suitability of instruments. Adaptation may be required to account for context-specific factors.

Key Performance Indicator and Core Measurements

A measurement approach for school stakeholders may involve: a Key Performance Indicator (KPI), core measurements, and questionnaires designed specifically for the target group and educational setting. This approach recognises the diversity of educational settings and ensures that measurements are appropriate and applicable to the specific context. These basic metrics (the KPI and Core Measurements) give a consistent approach to measuring wellbeing across diverse contexts, but bespoke surveys allow for a more nuanced understanding of the particular elements influencing teacher wellbeing in specific educational settings.

Below we recommend a KPI and set of Core Measurements which can be used as a foundation which school stakeholders can build their own set of questionnaires (from existing questionnaires or new designs) which is appropriate for their school and context. We focus our core measurements on the three aspects of subjective wellbeing.

> *"This school promotes the wellbeing of our staff. We define wellbeing as our staff being satisfied with their school lives, having positive experiences at, and feelings about, school, and believing that what they do at school gives them some purpose and meaning."*

The KPI recommended is job satisfaction, which mirrors the pupil school life satisfaction KPI in the 'Wellbeing in Education in Childhood and Adolescence' report (see Taylor et al., 2022). This is because schools are more likely to be able to 'move the needle' for their staff on workplace wellbeing than they are on general wellbeing, because they have more control over the factors that contribute to it. The KPI and Core Measurements below are taken from a paper by De Neve et al. (2023) which highlights the necessity of measuring all the elements of subjective wellbeing (life satisfaction, affect, and eudaimonia), with relation to workplace wellbeing, in a way that "...provide[s] meaningful variation in the different measures of workplace wellbeing, while not being overly burdensome" (p.14 De Neve et al., 2023). The KPI and Core Measurements are designed to be used in any workplace and therefore are not only relevant for teachers but other members of staff at school, making these foundational questions highly inclusive in a school setting.

KPI: Job Satisfaction
Question: "Overall, how satisfied are you with your job?"

Response on an 11-point scale: 0 (not at all) to 10 (completely)

Core Measurements
As above – responses on an 11-point scale from 0 (not at all) to 10 (completely)

- "Overall, how purposeful and meaningful do you find your work?"
- "How happy did you feel while at work during the past week?"
- "How stressed did you feel at work during the last week?"

These four questions (across the KPI and Core Measurements) are shortly to be adopted by several large organisations focused on workplace metrics (including wellbeing), which will provide a rich source of data for international benchmarking comparisons. For an in-depth discussion of the rationale for these items, please refer to De Neve et al. (2023).

Summary

Unlike the more mature literature on student wellbeing (as detailed in Taylor et al., 2022), the exploration of teacher wellbeing remains less advanced. The conceptualisation and operationalisation of teacher wellbeing as a concept and measurement lacks universal agreement, leading to diverse conceptual approaches in its measurement. Consequently, diverse teacher wellbeing interventions have emerged and been studied, aligning with distinct interpretations of "teacher wellbeing" as a quantifiable outcome. The absence of replicated studies and the constrained diversity and size of existing samples preclude definitive conclusions about the effectiveness of specific teacher wellbeing interventions. Instead, this report aims to shed a light on existing literature and guide educators towards evolving research avenues, particularly in the context of a post-COVID society.

Within the existing scope of teacher wellbeing intervention literature, numerous studies have examined the impact of MBI-related interventions on teacher wellbeing (Bonde et al., 2022; Flook et al., 2013; Frank et al., 2015; Gold et al., 2010; Poulin et al., 2008). These studies adopted the foundational MBI structure, entailing an 8-week meditation course with guidance. While MBI exhibits encouraging indications of potentially moderate, positive effects on teacher wellbeing through drivers like physical health and emotional regulation (Baer, 2003; Grossman et al., 2004), such conclusions merit further empirical examinations. It is essential to acknowledge that while MBIs are progressively gaining acknowledgment as evidence-based practices in education, they continue to evolve (Klingbeil & Renshaw, 2018). Even for the most extensively studied MBI related intervention, the generalisability of these interventions is limited, given that the cross-cultural validity remains unknown.

Each school is a unique ecosystem, and only those within it can discern the optimal intervention strategies for that context. A holistic stance necessitates decision-makers to take into account factors such as the appropriateness of the intervention for their targeted population, the alignment of the chosen intervention with their wellbeing goals, specific contextual and cultural conditions, the needs of all members in schools, and the availability of resources. The most robust intervention recommendation within this teacher wellbeing report is to tailor wellbeing interventions to meet the specific needs of the communities they serve, with input from school staff to ensure that the voices are reflected. Actively getting buy-in and feedback from school staff during development process is important in creating localised interventions. Centring staff voice and perspectives when creating interventions increases relevance, feasibility, and buy-in at specific schools.

The existing empirical evidence addressing teacher wellbeing and interventions for teacher wellbeing is still growing. Teacher wellbeing necessitates a multifaceted approach tailored to individual school contexts. While targeted interventions show promise, broader organisational change and community investment are needed for sustainable impact. Continued research, especially large-scale and longitudinal studies, can help refine our understanding of effective wellbeing promotion in schools. Emerging insights already suggest the importance of holistic strategies that empower teacher voice, foster supportive leadership, and culture, and nurture the collective wellbeing of the entire school community. With creativity, commitment, and collaboration, schools can create flourishing environments where teachers and students alike can thrive.

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For a full list of references used in this report and access to additional supplementary materials, visit wellbeing.hmc.ox.ac.uk/schools.

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