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Moments of mindfulness: exploring pupils' perspectives on short daily mindfulness activities and their potential effects on the classroom learning environment

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Abstract

This small-scale case study explores the perspectives of Year 4 pupils on doing a daily mindfulness activity in the classroom and whether there were any perceived benefits to doing this over a 4-week period. Initially participants completed a questionnaire to indicate their understanding of mindfulness and provide a brief summary of mental wellbeing. A separate post-questionnaire with pupils and teachers, alongside a focus-group discussion, afforded an understanding of the observed benefits and pupils' perspectives towards the intervention. Findings appeared to suggest that mindfulness activities can be beneficial in the classroom, particularly for reorienting pupils after a breaktime in preparation for learning. Furthermore, these activities are largely well received by pupils with high levels of enjoyment and desire to continue the activity post-intervention.

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Introduction

Increased emphasis is being placed on the mental health and wellbeing of children and adolescents in educational contexts. Subsequently, many interventions for promoting wellbeing, developing resilience and emotional regulation skills have been developed and are progressively being implemented in schools (Sawyer et al., 2012; Wilde et al., 2019). The 2019 Office for Standards in Education (Ofsted) framework further reinforces this with specific reference to "support learners to… know how to keep physically and mentally healthy" (Ofsted, 2019 p.11). Crucially, the updated Relationships and Sex Education (RSE) curriculum for September 2020 (Department for Education (DfE), 2019) places greater emphasis on teaching mental wellbeing with equal significance to physical wellbeing, outlining "teachers should be clear that mental wellbeing is a normal part of daily life" (p.32). Until recently, many have associated the term *mental health* exclusively with mental-ill health.

The purpose of this research was to investigate the impact of a small-scale mindfulness-based intervention (MBI), based around promoting wellbeing and raising awareness of this equal importance of mental and physical health. A mindfulness approach was chosen for its ease of integration during the school day and its suggested positive benefits in cultivating self-regulation, which will be discussed further in the literature review.

This small-scale research project was conducted in a school in Cambridgeshire, rated 'Good' by Ofsted in 2019. A sample of 21 Year 4 children and three supporting adults took part in a 4-week MBI from which a mixed-method approach was used to explore pupils' perspectives on the MBI and any consequential effects on the learning environment. Pre- and post-questionnaires assessed overall pupil wellbeing and understanding of mindfulness and the post-questionnaire also established pupil perspectives towards mindfulness, its efficacy and place in the classroom. A small focus group was

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used to develop a deeper understanding of some pupil's perspectives. A separate questionnaire probed the adult sample for opinions and perceived merits of mindfulness. The following questions were chosen as foci, after considering the literature:

What are pupils' perspectives towards daily mindfulness activities in the classroom?

To what extent can mindfulness activities help to reinstate calm in the classroom and promote a positive learning environment?

Literature Review

Mindfulness and its origins

Several definitions for mindfulness exist in the literature, but these all share its fundamental principle of attention. A widely cited definition from Kabat-Zinn (1994) describes it as "paying attention in a particular way: on purpose, in the present moment, and non-judgementally" (p.4). Others summarise it as "a way of 'being', which has prescribed characteristics, activities and programs designed to cultivate this way of being, as well as ancient meditation techniques rooted in various religions" (Albrecht, Albrecht & Cohen, 2012, p.1). Drawing comparisons across the literature, Renshaw and Cook (2017) suggest that mindfulness is made up of two core components: focusing on what is happening right now and responding positively to these thoughts and feelings.

Mindfulness originated from Eastern traditions (Baer, 2003) and, although now largely secularised, rose from Buddhist practice where mindfulness is central to meditation (Kabat-Zinn, 1994). From this perspective, mindfulness facilitates the awakening from the ordinary limited waking-state of consciousness and encourages greater awareness of life's conscious and unconscious possibilities (Kabat-Zinn, 1994). Mindfulness requires paying attention, fostering clarity and acceptance of what happens moment-by-moment. Asides from its origins, mindfulness has little to do with religion: secularised mindfulness has risen in popularity within Western societies for those desiring to reap its proclaimed benefits for improving outcomes, and alleviating or preventing suffering (Kabat-Zinn, 1994; Renshaw & Cook, 2017). In line with the main body of research, mindfulness will be explored from the Western perspective rather than Eastern traditions (Greenberg & Harris, 2012; Hart, Ivtzan & Hart, 2013; Kabat-Zinn, 1994; Renshaw & Cook, 2017).

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Mindfulness is an effortful process used for shifting awareness beyond the ordinary neurological state of automatization and subconscious processing. Langer (1989) suggests that Western societies tend to rest in this state for too long and, although unconscious processing is essential for efficient functioning and attending to higher-order functions, a greater balance between the two states should be achieved.

The benefits of mindfulness

Clinical

Recent years have seen a significant spike in interest of secular mindfulness strategies for supporting wellness across all societal domains, especially in mediation and yoga. This increase in interest is also reflected in the past two decades of research, citing benefits of mindfulness in clinical and educational settings amongst others (Chadwick & Gelbar, 2016). Within this, some studies cite empirical data to suggest potential benefits of mindfulness and meditative practices in clinical settings. Notably Harvard scientists used neuroimaging to find that meditation had a positive effect on brain activity of the chronically stressed (Schatz, 2011) and another MBI was found effective in treating anxiety, depression and pain (Goyal et al., 2014).

Developmental

Vago and Silbersweig (2012) outline mindfulness at the neurological level, including its role in the development of attentional control: improving the ability to focus, maintain and shift attention when required. These skills are central to the brain's executive functioning and self-regulation. Self-regulation skills, facilitating optimal responses to emotionally and cognitively demanding stimuli, are developed in early and middle childhood (Fjell et al. 2012; Posner, Rothbart, Sheese & Tang, 2007). Self-regulation requires two key processes of attention control and emotion regulation: the ability to modify the experience and expression of emotions (Gross & Thompson, 2007; Kaunhoven & Dorjee, 2017). Fundamental to everyday functioning, higher levels of self-regulation have also been correlated to: enhanced wellbeing; effective relationship formation and maintenance; as well as decreased risk of physical and mental disorders (Althoff, Verhulst, Rettew, Hudziak, & van der Ende, 2010; Buckner, Mezzacappa, & Beardslee, 2009). Fostering this high level of self-regulation early is important, since pre-adolescence sees the rapid maturation of the neural networks which underpin

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self-regulation (Posner et al., 2007). Considering this, Kaunhoven and Dorjee (2017) review a body of evidence suggesting that mindfulness is effective in helping children to modulate self-regulation, finding strong empirical implications that MBIs targeting enhancements in self-regulation have substantial merit. This review, alongside several other key research papers, form the foundation upon which the Mindfulness in Schools Project (MiSP) started: a wide-scale research effort in UK secondary schools implementing an MBI course.

Public Health England (PHE) (2015) notes the complex relationship between pupil physical health, mental wellbeing and illnesses, suggesting positive mental wellbeing as an influencing factor in making healthy lifestyle choices. They also note the impact of significant life events on the mental wellbeing of children; increased emotional intelligence and awareness can mitigate negative effects of these (PHE, 2015). Emotional intelligence is defined as “the ability to recognise and regulate emotions in oneself and others and involves being able to handle difficult and powerful emotions and redirect them in a positive manner, to accurately perceive emotions being felt, and have empathy” (PHE, 2015, p.13).

Mindfulness-based interventions (MBIs)

A plethora of differed MBIs are readily available and accessible in the public domain, targeted at a variety of audiences and comprised of different combinations of mindfulness-based activities. Many MBIs presented in the literature take a more structured approach, typically 6- to 8-week lesson schemes, where students are mainly offered mindfulness practices and short meditations supported by discussion. Others take a shorter, less structured approach (Miller, Borsatto & Al-Salom, 2019) or integrate other activities such as yoga or social and emotional learning (Weare & Huppert, 2019).

Although some would argue that MBIs have moved so far away from the original Buddhist foundations and more intensive mindfulness training that they are unrecognisable (Grossman & Van Dam, 2011), many interventions exist for both adults and children underpinned by the fundamental ideas of mindfulness to promote wellbeing (Miller et al., 2019). Miller et al. (2019) note potential benefits of even short, 3-minute mindfulness sessions as part of undergraduate teaching.

Contemplative practices require the control of physical and mental activity of participants. These can include practices enhancing awareness of thoughts, emotions and sensations as well as guided visualisations (MiSP, 2015) led by teachers, leaders, audio-recordings or books. Meditations aim to

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focus attention on processes, visuals, or particular objects (Greenberg & Harris, 2012). Many adults practice mindfulness in a variety of ways, both formally and informally. MBIs are easily accessible for adults, with apps offering mindfulness meditations, guided visualisations and yoga sessions alongside more formalised practices. Traditional practices and adult MBIs must be adapted for use with children (Roeser & Peck, 2009), such as through guided imagery and story meditations used in this study. The developmental needs of those taking part must be carefully considered for the success of MBIs including: initial attentional capabilities, level of language, cognitive awareness, and endurance level (Chadwick & Gelbar, 2016).

Mindfulness in schools

Mindfulness has increased in popularity within the educational context as a result of the increasing evidence, both anecdotal and empirical, arising in the research field of its potential merits in promoting pupil wellbeing and fostering productive learning environments. Various publications have suggested how mindfulness could benefit learning contexts, highlighting that pupils must be focused and able to deal with stressful situations for effective learning, both of which can be increased through being fully present (Garrison Institute, 2005; Semple, Droutman & Reid, 2017).

Mindfulness in education rose in popularity following a Garrison Institute report (2005) which suggested how mindfulness may cultivate more positive learning environments where students are more ready to pay attention and learn after developing practical skills for attention, focus and calm. At the time of publication, few studies existed to form a secure research basis for some of the recommendations published; however, since then more publications have cited the positive benefits of mindfulness, resulting in elements of mindfulness and MBIs to be used in many schools in Western societies, particularly the UK and USA. Some critics, however, have cautioned against using mindfulness interventions in education, arguing that the “enthusiasm for promoting outweighs the evidence supporting them” (Greenberg & Harris, 2012, p.165).

Early research from Napoli, Krech and Holley (2005) noted moderate improvements in attention, social skills and test anxiety in Early Years pupils compared to controls following bimonthly interventions. Other studies provide empirical evidence for how implementing MBIs effectively can have a positive impact on alleviating problem behaviours in particular school populations, notably those with attention deficit disorders and Special Educational Needs and Disabilities (SEND) (Schonert-Reichl & Lawlor, 2010; Singh et al., 2007). Furthermore, many suggest more generally

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positive impact of mindfulness on the executive functioning of all children, enabling more skilled directing, focusing and sustaining of attention; as well as improved working memory (Napoli et al., 2005; Ricarte, Ros, Latorre & Beltrán, 2015). Ager, Albrecht and Cohen (2015) also reported pupils exhibiting greater awareness of attentional processes and appearing more ready to learn following MBI. The first large-scale implementation of MBIs in UK schools started with the Mindfulness in Schools Project (MiSP), where structured mindfulness courses were taught in secondary schools across the country (Chadwick & Gelbar, 2016; Kuyken et al., 2013).

Publications have largely focussed on outcomes of MBIs, rather than pupil's perceptions, prompting Ager et al. (2015) to review perceptions of primary-aged pupils on mindfulness. Themes of 'happiness', 'calmness' and 'relaxed' were found within the small sample analysed corresponding to other studies reviewed (Ager et al., 2015; Cruchon, 2009; Coholic, 2011). Despite the limitations of sample-size and minor methodological inconsistencies, the positive correlation to prior research prompted the authors' suggestion for mindfulness to be implemented within all schools, emphasising the importance of being reactive to the needs and perspectives of pupils (Ager et al., 2015).

Limitations

Meta-analyses indicate potential limitations in some areas of the research field, largely grounded in small sample sizes and uneven application of interventions, making any results challenging to generalise to wider populations (Bishop et al., 2004). Felver, Celis-de Hoyos, Tezanos and Singh (2016), however, found many strengths in the existing literature reviewed, with studies providing samples with an equal balance of gender, race and ages. Most research reviewed also took place within natural classroom contexts, allowing for increased validity and for skills to be transferrable post-intervention. Despite this, studies relied mostly on single-method and single-informant data collection through questionnaires, which could be perceived as a limitation on their validity and rigour in the research field (Felver et al., 2016). Consequently, Felver et al. (2016) make recommendations for further research to adopt experimental research designs and use active control conditions amongst others (Felver et al., 2016).

Methodology

This section aims to outline the research design, participant sample and data collection methods used to gain an understanding of perspectives towards MBIs in school.

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Research design

A small-scale study was carried out in a primary school in Cambridgeshire to investigate pupils' perspectives towards a 4-week daily MBI. The perceptions of overall intervention efficacy in boosting pupil wellbeing and fostering a positive learning environment was also evaluated through various means. The research followed a mixed-method design to allow both quantitative and qualitative data to be collected for thematic analysis, allowing for further breadth and depth of understanding (Johnson, Onwuegbuzie & Turner, 2007). Qualitative data was collected initially in a pre-questionnaire aimed to determine overall pupil wellbeing, followed by the intervention implementation. Both quantitative and qualitative data were collected post-intervention for evaluating pupils' perspectives. A focus group discussion with four children and a separate adult questionnaire was completed to supplement questionnaire findings. This allowed for greater depth in answering the proposed research questions.

A mixed method design allowed for an increased reliability and validity of data along with greater depth and breadth of understanding the topic as a whole, focusing particularly on pupils' perspectives. Following recommendations of Felver et al. (2016), pre- and post-test measures were included to monitor emotional wellbeing and a multi-method experimental research design was adopted. Data was collected from multiple informants respectively for increased understanding of the benefits of the MBI and increased validity of findings.

Participants

The sample was the whole Year 4 class in which I was teaching at the time. Permission was granted from the Headteacher of the school to implement a daily MBI as part of the day-to-day teaching and learning. Written consent detailing this was obtained from the Headteacher who, following detailed discussion of research design, confirmed the school's policies in place covered the approval for all pupils to take part in such research.

The class had 22 pupils aged 8-9, made up of 9 girls and 13 boys. One boy was absent for post-data collection and therefore pre-data was discounted, leaving a sample of 21 pupils. Responses from three adults working within the room were also obtained to evaluate perceptions of efficacy in promoting pupil wellbeing and fostering a calm classroom environment conducive to learning. No pupils were excluded from the data set on account of underlying specific needs or demographics, as the research

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sought to be inclusive of evaluating all pupils' perspectives on MBIs and equip all with the skills for practising mindfulness. I am aware, however, that the imbalance of participant sex and mixed demographic group could be thought to skew data and inhibit the wider generalisation of findings. Nonetheless, the sample still provided sufficient perspectives and provided a practical representation of what mindfulness might look like in a typical diverse classroom. Pupils with SEND were provided with suitable support to access the data collection methods. An adult read and acted as scribe for one child, accurately noting answers, and pupils were encouraged to ask for required support to ensure that answers to the questions were not inhibited by a lack of understanding.

Data collection

Pre-intervention questionnaire

In order to gain an understanding of pupil's perceived general mental wellbeing, awareness of emotions and knowledge of mindfulness, a short pre-intervention questionnaire was designed. Research suggests that primary aged pupils aged 7+ have the capacity for introspection and evaluation of feelings and emotions, but age-appropriate methods must be considered when getting children to do this (PHE, 2015). 12 statements were used, simplified for accessibility to the sample, based loosely on statements provided in leading child wellbeing assessment frameworks including the Warwick-Edinburgh Mental Wellbeing Scale (Tennant et al., 2007)*;* The Good Childhood Index (The Children's Society, 2014) and Heubner's Student Life Satisfaction scale (Huebner, 1991). Responses were given across a three-point scale of *Yes, No* and *Unsure,* to be more accessible for participants independently responding to the questionnaire. All participants completed this before the MBI began. Responses to statements were coded according to desirability or undesirability: a value of 10 was given to a positive response (desirable) such as "*yes"* to *I feel happy at home*; a value of 5 was given to neutral '*unsure*' responses; and 0 was given to negative (undesirable) responses, including *"yes"* to *I sometimes get stressed* and *"no"* to *I feel happy at home.*

Mindfulness-based intervention (MBI)

After pre-questionnaire data was collected, a daily MBI was introduced to the class for 10 minutes after lunch time. Initially, pupils were introduced to: the concept of mindfulness; its uses; and the importance of nurturing mental health as well as physical health, reflecting recommendations in the new RSE curriculum (DfE, 2019). At no point was the notion of using mindfulness to treat mental

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ill-health discussed, since the MBI instead aimed to promote positive wellbeing and provide strategies for coping with potential stressors moving forward. The MBI comprised of two parts: an initial breathing activity and a mindful meditation or awareness activity. Children were introduced to the concepts of infinity breathing (breathing whilst tracing an infinity sign with finger for focused attention), square breathing (controlled breathing in and out whilst visually tracing the edges of a quadrilateral) and counting (breathing to different counts), and these were used in rotation. The second activity was based around books published by Relax Kids and meditations from three books were used (Viegas, 2005; 2014a; 2014b). Participants were invited to close their eyes, listen, visualise and react to the meditation story read by myself, the researcher. These meditations asked children to visualise seeing or holding different objects, construct their own imaginary worlds, or move different parts of the body to relax. A different meditation was read in every session so to not be repetitive.

Post-intervention questionnaire

After 4 weeks, a post-test questionnaire was completed by 21 participants. One child was absent for this, and therefore all their data was omitted from analysis. The questionnaire asked participants to repeat the same 12-statement grading completed pre-intervention to assess wellbeing. Following this, participants answered eight questions to yield both qualitative and quantitative data and assess overall enjoyment and benefit of the MBI. Upon collection, this data was coded into an Excel spreadsheet for analysis qualitatively and quantitatively using statistical and thematic analysis. Common themes were explored in qualitative questions and participant quotes were used to supplement analysis. A separate questionnaire was given to three classroom adults post-intervention to understand observations and perceptions of the MBI in practice.

Focus group discussion

Following the questionnaire, a focus group of four children was randomly selected for further discussion about mindfulness. This took place during the school day in an area outside of the classroom. Pupils were asked to discuss further their opinions of mindfulness, if it helped them personally, and suggestions for improvements. Focus groups broaden the views available to researchers making them advantageous to one-to-one interviews (Denscombe, 2017). Furthermore, Hess (1968, as cited in Vaughn, Schumm & Sinagub, 1996) notes their strengths in increasing spontaneity, synergism and security, as pupils feel more comfortable discussing as a group. This took

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on a semi-structured style as prompt questions guided conversation and ensured topic focus without being overly prescriptive and stunting responses. Participants were given opportunity to withdraw from the focus group before and after explaining that anonymised notes and quotations would be taken by the researcher during their discussion. No participants requested to withdraw and therefore the discussion commenced.

Ethical Considerations

In the interest in maintaining complete transparency (British Educational Research Association (BERA), 2018), a meeting was held with the headteacher of the school to discuss the research methodology, data collection and analysis methods, who agreed that their school policies established would cover this research taking place without requiring individual consent from all pupil's parents, providing all data was anonymised and destroyed post-publication. In this way, he acted 'in guardianship' of the participants (BERA, 2018). Only upon confirmation from personal tutor, headteacher and school mentor was the intervention started. A consent form, including research summary, was drafted and signed by the Head teacher to confirm this consent. This consent form assured the school that all data collected would remain anonymous to protect anonymity of school and pupils throughout, as per the norm in research (BERA, 2018). Initials were used to cross analyse the pre- and post-data along with the focus group participants, but these were later changed appropriately in analysis and discussion of findings. All pupils in the class were expected to take part in this daily mindfulness activity akin to any other teaching and learning activity within the school day.

I shared the purpose of the data collection activities with the children, explaining how I wanted to find out whether or not mindfulness can help within the classroom and if pupils truthfully enjoyed it. This was to ensure that participants "understand, as well as they can, what is involved within a study" (BERA, 2018). Following BERA guidelines (2018) I remained open to the possibility of participants withdrawing consent during the process and therefore reiterated this to the participants twice before commencing the focus group discussion: before and after explaining that notes will be taken for reference.

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Results and Discussion

This section will discuss the findings in relation to the proposed research questions. Data will be critically discussed alongside the literature and methodology used to identify the overall benefits of the MBI and the views to which the pupils participating held.

General wellbeing

Overall sample wellbeing was assessed pre-intervention using the pre-test questionnaire. Many pupils reported frequently feeling worried or stressed, with high proportions reporting to worry about the past and future. Pupils generally felt supported and had some idea over deliberate emotional regulation, with some awareness of what to do when upset; however, few reported to take time to consider their emotions. Overall, the sample had limited knowledge of mindfulness and as a result 57.10% did not attempt to define it.

There were some changes pre- to post-test in certain areas of the sample's emotional wellbeing and awareness (Table 1 below), although these differences must not be overemphasised due to the short MBI length. Nevertheless, conducting pre- and post-tests provided insight into the emotional wellbeing and understanding of the class; therefore, minor comparisons will be drawn to supplement other findings. A longer intervention with more rigorous processes would be required to make deeper conclusions over the impact of an MBI over time within a specific classroom or a wider population.

	Statement	Percentage increase pre-post	Percentage decrease pre-post
Q1	I often get worried		53.50
Q2	I sometimes get stressed	57.14	
Q3	I know what to do when I am feeling sad	0	0
Q4	I am getting all the help I need	0	0
Q5	I feel happy most of the time	12.50	
Q6	I know how to control my emotions	8.33	
Q7	I worry about the past		66.67
Q8	I worry about the future		7.14
Q9	I feel happy at school	5.71	
Q10	I feel happy at home	2.7	
Q11	I know how to calm myself down when I am angry or upset	11.11	
Q12	I take time to think about how I am feeling	4.76	

Table 1: Percentage difference pre- to post-test

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Responses could also reflect pupil mood on day of completion thus are not conclusive proof of mindfulness impacting on pupil overall wellbeing. However, there is some indication that post-intervention pupils felt better able to regulate their own emotions, with an 11.11% increase in those reporting to know how to calm themselves down, and a 4.76% increase in those reflecting on their emotions. No change was recorded for statements three and four which both remained positive.

Understanding mindfulness

Pupils showed a clearer understanding of mindfulness post-MBI. Pre-instruction definitions varied considerably, with many confusing mindfulness with: “mindful”, being careful of actions; and thinking of others. Three participants showed some understanding of the term, describing it as “a couple of minutes quiet to think or colour or read…” or “something to do when you want to calm down or relax…”.

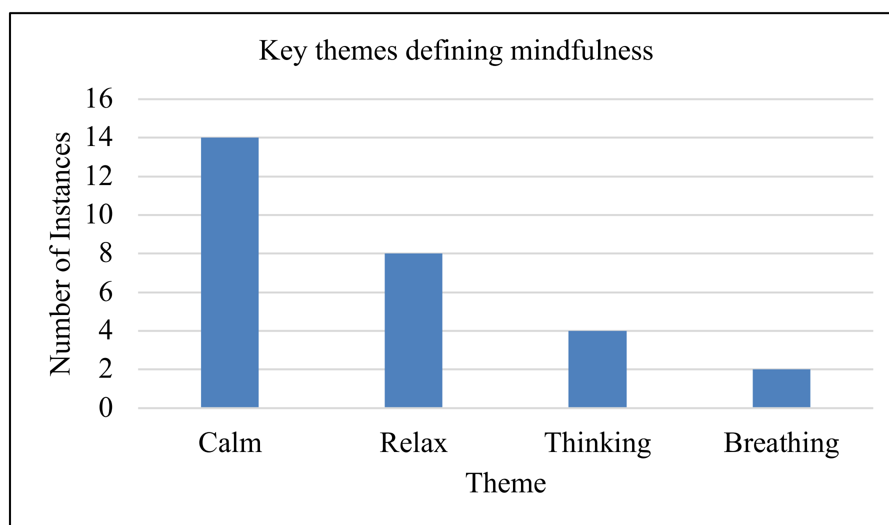

Figure 1: Main themes used when defining mindfulness

Post-questionnaire responses showed several themes in pupils’ definitions of mindfulness. Figure 1 details the four key themes that arose in the data. Most notably, 14 definitions included the idea of mindfulness being used to calm: eight also using themes of relaxation. One participant described it as “something you can do anywhere and if your [sic] angry or sad you can do it. It's relaxation.” No participants referred to attention, a core principle defining mindfulness (Ager et al. 2015; Kabat-Zinn, 1994); however, this could be attributed to pupils’ lack of awareness of the MBI facilitating focused attention, instead focussing on purpose and outcome.

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During focus group discussion, one pupil described how mindfulness "is good for our mental health... people forget about your mental health... you can use mindfulness to help you out", reflecting a key teaching point of the MBI. The purpose of the MBI was justified to pupils as motivation to take part. Pupils showed a secure understanding of mindfulness as an active behavioural process, where it is something to be done to improve an outcome (Renshaw & Cook, 2017).

What are pupils' perspectives towards daily mindfulness activities in the classroom?

This research question aimed to establish pupils' perspectives towards completing a daily MBI as part of their learning routine. 21 pupils completed the post-questionnaire to provide insight into this.

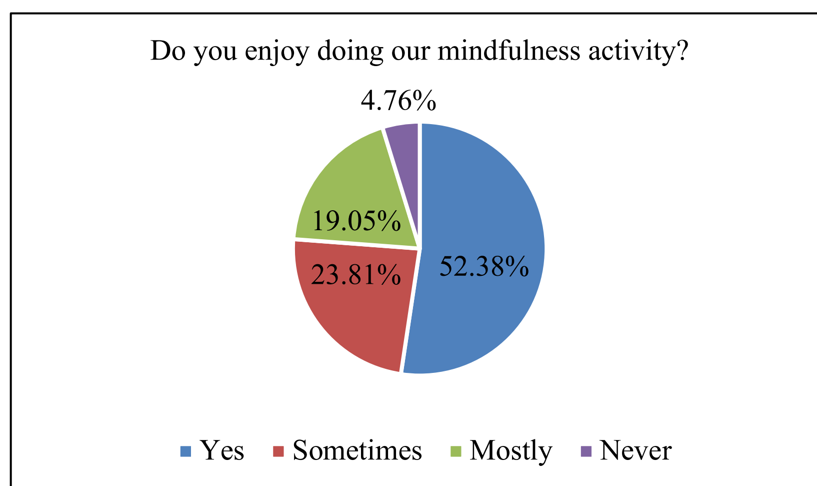

Figure 2: Percentage of sample reporting to enjoy MBI

As Figure 2 reveals, the majority of pupils enjoyed doing the MBI, with only 4.76% indicating they never enjoyed it. A cumulative total of 71.43% either responded *"yes"* or *"mostly"* to their enjoyment, and 23.81% indicated that they *"sometimes"* enjoy it. A qualitative question supplemented this, allowing for deeper insight into response reasoning. Reasons for disliking included: "how long it is", "don't like breathing" and "I don't see how it helps me", indicative that particular elements are undesirable to some. Conversely, common reasons for liking included use of stories and imagination: "I liked listening to the stories and imagining I was having an adventure". Similarly, the common adjectival themes "calming" and "peaceful" used corresponded to similar adjectives presented frequently in the body of research both as pupils' perspectives (Ager et al., 2015; Coholic, 2011; Cruchon, 2009) and for defining mindfulness (Huppert & Johnson, 2010; Kane, 2018). One participant with SEND responded *"Yes"* but "I can't keep up with the stories sometimes,"

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reinforcing of the importance of careful matching of activities to the developmental needs of participants noted by Chadwick and Gelbar (2016), including attentional capabilities and ability to maintain pace. One participant voluntarily added an extra comment saying, “I love mindfulness and I would really like to carry on doing it”, underlining that some pupils found it both enjoyable and useful.

One focus group child had previously attended a mindful sleep course, where a multi-faceted MBI used aimed to develop skills for assisting sleeping. This pupil described his experiences to the group, generating excitement for incorporating these ideas in the future classroom MBI. When asked why pupils found the activity boring, another pupil said, “I think it would be better to do a different activity every day as people might have different ways of calming down and so it doesn’t get boring doing the same thing”. Huppert and Johnson (2010) emphasise how a one-size-fits-all approach is ineffective for interventions since everyone responds uniquely to different stimuli and activities. Considering this, focus group discussion provided crucial suggestions for future development to ensure access to all.

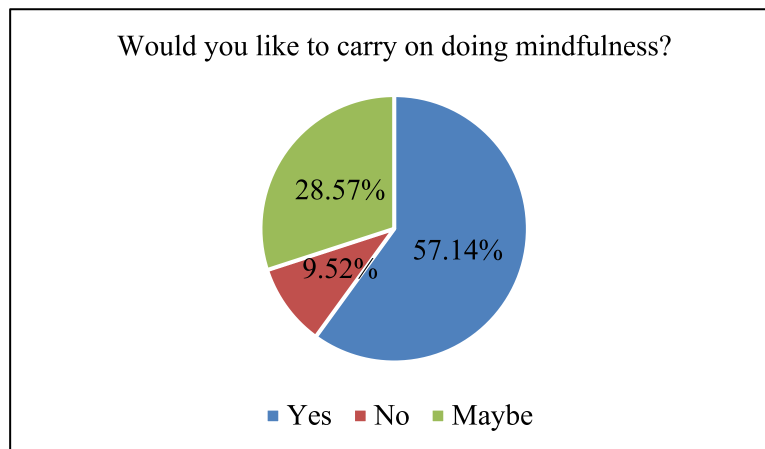

Figure 3: Percentage of pupils wanting to continue MBI

Figure 3 above illustrates the responses of pupils regarding their desire to continue mindfulness after the intervention ceased. 57.14% of pupils agreed that they would like to continue and a further 28.57% answered *“maybe”*. Two focus group children answered *“maybe”* to this question and explained that their tentative answer reflected how it sometimes became boring due to repetitive activities. Altogether these results suggest that only a small percentage of the pupils did not respond positively to the intervention and most would like to see it continue. Figure 4 shows common themes presented by pupils for continuing mindfulness. The most common theme appearing was “helpfulness” used in

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nine explanations. Six showed the theme of "liking it", whilst "relaxing" and "calming" appeared three and five times respectively. Conversely, "boring" appeared in two explanations alongside two children reporting to not "need it". Interestingly, at no point did the MBI present mindfulness as a solution to mental ill-health; therefore, it could be speculated whether these have arisen in response to the stigma carried by the term mental health.

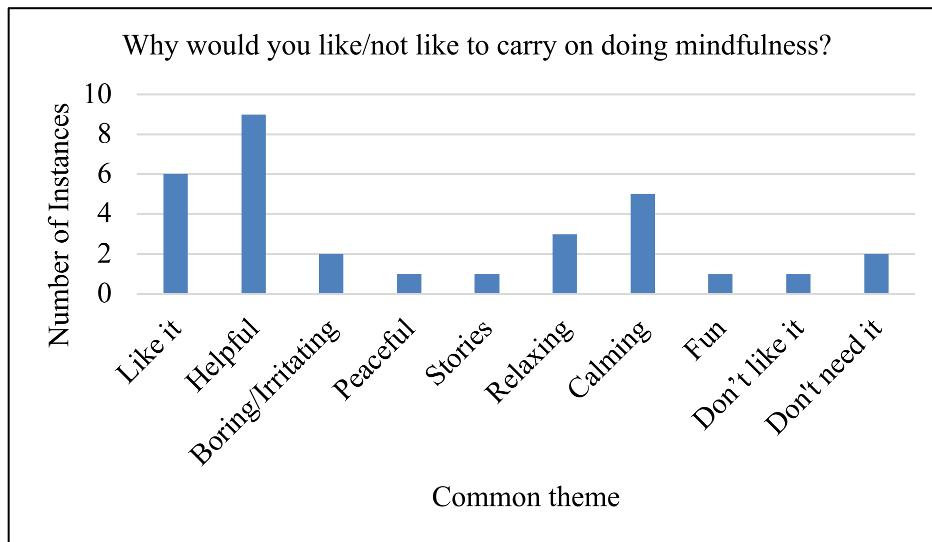

Figure 4: Common themes of why pupils would/would not continue MBI

Figure 5 reflects pupils' self-reports of whether they will use mindfulness skills learnt in their day-to-day lives. A substantial proportion of the sample suggested that they would, with some providing further explanation including: "I will go into my bedroom and practise mindfulness" or "because it really helps".

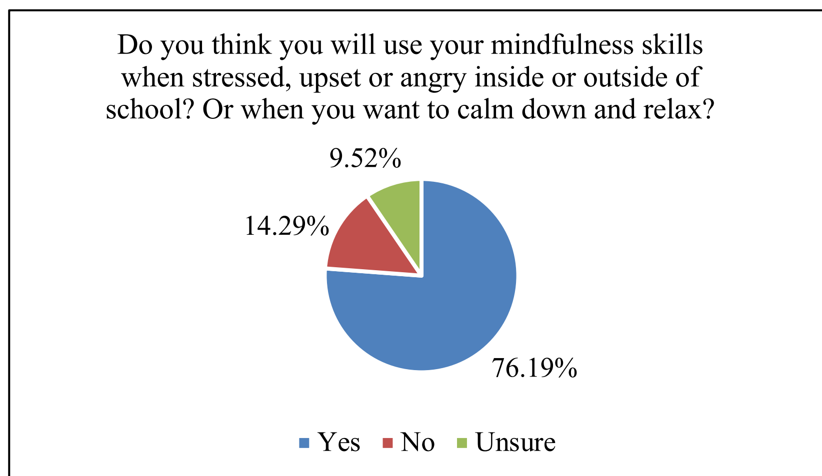

Figure 5: Percentage of sample willing to use MBI skills in future

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This data suggests that the MBI successfully equipped pupils with important skills to promote their mental wellbeing and for self-regulation of emotions which they feel confident to deploy outside of the classroom. Furthermore, focus group discussion provided deeper insight into anecdotal use of mindfulness outside of school. Participant B mentioned that after several sessions he started doing it at home, taking time out to calm down and reflect alone, reporting that “it has really helped me at home”.

To what extent can mindfulness activities help to reinstate calm in the classroom and promote a positive learning environment?

This question aimed to explore whether mindfulness helped to foster a positive and productive learning environment. Roeser et al. (2013) suggest that ineffective learning environments and increased teacher stress are prevalent issues in the classroom, influenced by the lack of explicit teaching of attentional skills and high prevalence of affective disorders. Mindfulness by definition, “paying attention…on purpose” (Kabat-Zinn, 1994), trains users in focusing attention deliberately to the present moment, developing deeper attentional skills.

A Garrison Institute report (2005) suggested that many schools adopt mindfulness as an accessible way to help pupils to become calmer and more focused, whilst feeling less stressed and prone to distractions. Post-intervention questionnaires completed by adults reflected this positive impact mindfulness had in reinstating calm into the classroom. Teacher A reported that “after the mindfulness session they were more focussed and attentive” and they “visibly appeared to be relaxed during the sessions”. Teacher C also noted that “although some children don’t enjoy [mindfulness]… it provides them the opportunity for quiet thinking and reflection” and that there was a “calmer classroom particularly after lunch” after the daily MBI session. In concordance with the literature, pupils appeared more ready to learn and it cultivated a more positive environment for beginning the afternoon’s learning (Garrison Institute, 2005). Similarly, Teacher B praised its impact on break-to-learning-time transitions, allowing for children to “reset their minds” and calm down. These responses postulate that mindfulness was a beneficial addition to the day and facilitated pupil learning.

Responses indicated that some mindfulness-based activities were already used in the school such as through sensory circuits, using ‘relax and calm’ activities or “heads down quiet reflection time”. Despite this, upon discussion with Teacher C, these were not explicitly introduced to pupils as

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mindfulness activities nor were reinforced regularly, used when the pupils were excitable and needed to calm in preparation for learning.

Corresponding with the pupil self-report, all three adults observed that overall the children mostly enjoyed the MBI. All three of the adults responded positively to placing importance on educating children about mental health and teaching strategies for looking after mental wellbeing. Knowing this, following the intervention all three adults stated that they would consider carrying on mindfulness in their classrooms, either daily or 2+ a week: a strong indication of its value. Further discussion acknowledged that although not all pupils always enjoyed participating, it provides important time for quiet reflection that pupils should all have and that suggestions for improvement provided in focus-group discussions could help tailor the MBI for the class moving forward.

Critical Analysis of Methodology

Using a mixed methods approach, pairing the two research paradigms, provided me with deeper insight into pupil's perspectives towards mindfulness and its impact on their learning. Triangulation of data from multiple sources allowed for greater validation and confidence in accuracy of findings, as well as helping to provide a more complete picture the success of my classroom MBI (Denscombe, 2017). Mixed approaches can increase risk of non-corroboration (Denscombe, 2017) but fortunately no significant non-corroborative findings were found and instead its pragmatic approach allowed for data collection methods to be tailored to the individual research questions posed. Similarly, qualitative methods may facilitate researcher bias, drawing upon desirable evidence; therefore, Denscombe (2017) suggests that researchers must remain open-minded and reflexive to limit impact of researcher-self on conclusions. I was careful in considering all data both positive and negative towards mindfulness regardless of pre-disposed positive opinions of it as a mindfulness practitioner and mental health advocate. For instance, the focus group discussion was largely positive; however, I was aware that four children's views did not account for the whole sample, especially those who noted dislike for the MBI. Moving forward multiple group discussions would allow for a wider variety of viewpoints to be explored.

Although questionnaires are a common qualitative data collection method, it is possible that participants could misinterpret the question, statement or coding system. Considering this, statements were read out by myself and the pupils responded independently to minimise the risk of a

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comprehension barrier. In doing so, Denscombe (2017) would argue that this pre-questionnaire reflected a 'structured interview approach' and could risk interviewer effect: responses being affected by my identity as an authority figure to participants. Consequently, the post-questionnaire was amended for clarification using *'yes', 'no'* and *'unsure'* to faces provided and this would be further adapted if replicated. Questions were kept short so to not lead to 'satisficing answers': pupils selecting responses in a randomised way due to boredom or mental burden (Krosnick, 1991). Furthermore, questionnaires risk responses with unsatisfying depth and detail required for analysis (Denscombe, 2017); however, this was counteracted through supplementation of other data collection methods.

The small-sample nature using one age-demographic and classroom limits the external validity of the study and generalisability to other classroom contexts. Despite this, promising findings were discovered in line with previous research on the merits of MBIs in schools. Future research could investigate this further to monitor patterns of findings across multiple contexts, using more experimental approaches to evaluate the gains of mindfulness alongside pupils' perspectives on a wider scale.

Conclusions and Implications for Future Practice

Beginning this study, I was hopeful that my research would show the merits of mindfulness in the classroom and that it would be perceived by pupils as an enjoyable addition to the school day. I have found this to be mostly true, as the majority of pupils found it both enjoyable and helpful in regulating their emotions. Furthermore, mindfulness appeared promising in helping to foster a calmer environment where pupils were more ready to learn; therefore, it could be beneficial to use mindfulness at particular times of day to regain focus and attention on learning activities.

This research project also reinforced the value of consulting children and gaining pupil's perspectives relating to their teaching and learning experiences. It impressed me how mature and proud the class were in contributing: they relished the opportunity to suggest ways that the intervention could be adapted to suit their needs moving forward. Pupils were good at articulating their views and suggestions in a logical and realistic manner. Acknowledging these perspectives will help me to further develop my practice, to tailor the MBI implemented in my classroom to be more inclusive of all and thus more successful. Pupil suggestions were also fed back to the class teacher, who was keen to continue using similar mindfulness activities. Most notably, pupil feedback highlighted issues with

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repetitiveness of activities; therefore, a carousel of mindfulness-based activities for different weekdays could provide suitable variation and allow more pupils to access the benefits of mindfulness.

Many prior studies focussed on how mindfulness can help specific populations, such as those with attention-deficit disorders and SEND (Schonert-Reichl & Lawlor, 2010) or gifted-and-talented students (Kane, 2018), rather than general cohorts. Although some studies did present MBIs school- or class-wide to note benefits for all, these were overall less common or complex in nature. Considering this, this study was beneficial in showing how mindfulness can be realistically implemented within a classroom without impeding too much on a busy school timetable. Furthermore, reviewing the potential benefits of mindfulness cited in the literature, teaching mindfulness could potentially equip my students with vital skills of emotional regulation and attention required across all domains of their lives. Knowing this, I would aim to explore this through further research over a longer period of time.

Benefiting from a calmer teaching and learning environment and receiving positive pupil feedback on how mindfulness has helped them, has reiterated its promise as an intervention. Although not all children in enjoyed it, further research to seek pupil's perspectives and trialling different methods would facilitate a more tailored and successful MBI within future classroom contexts. Similarly to Miller et al. (2019), I was able to show how easy and cost-effective it can be to implement an MBI in a teaching context. This is promising for myself and other practitioners working in a school where an empirically backed MBI, which is often costly, is unavailable. A well-thought-out series of activities underpinned by the core principles of mindfulness appears to suffice in reaping the benefits of MBI without this financial and time burden.

Although Greenberg and Harris (2012) suggest that the benefits of mindfulness 'fads' are over-emphasised, since its publication substantially more research has presented a greater evidence base for mindfulness in education, driven by the MiSP. Although limitations do unquestionably exist in some research, including my own, patterns of findings would suggest that mindfulness has some merit in: helping to improve pupils' attentional capabilities; fostering calm; and teaching pupils about the importance of nurturing mental wellbeing. With the recent RSE curriculum change in mind, this is ever important for fulfilling the statutory requirements of teachers to provide pupils with skills "to protect and support their own and others' health and wellbeing" (DfE, 2019:32) including mental

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health. Reflecting on this as a practitioner, I would argue that there is sufficient evidence-backing to justify implementing a mindfulness-based activity within the classroom and that this would provide a practical method for beginning to meet this statutory requirement.

References

Ager, K., Albrecht, N. J. & Cohen, M. (2015). Mindfulness in Schools Research Project: Exploring Students' Perspectives of Mindfulness **-** What are students' perspectives of learning mindfulness practices at school? *Psychology, 6*(7), 896 – 914. doi: 10.4236/psych.2015.67088

Albrecht, N. J., Albrecht, P. & Cohen, M. (2012). Mindfully Teaching in the Classroom. A literature review *Australian Journal of Teacher Education, 37*(12), 1 – 14. doi: 10.14221/ajte.2012v37n12.2

Althoff, R. R., Verhulst, F. C., Rettew, D.C., Hudziak, J. J., & van der Ende, J. (2010). Adult outcomes of childhood dysregulation: a 14-year follow-up study. *Journal of the American Academy of Child & Adolescent Psychiatry, 49*(11), 1105–1116. doi: 10.1016/j.jaac.2010.08.006

Baer, R. A. (2003). Mindfulness training as clinical intervention: A conceptual and empirical review. *Clinical Psychology: Science and Practice, 10(2),* 125–143. doi: 10.1093/clipsy.bpg015

Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., … Devins, G. (2004). Mindfulness: A Proposed Operational Definition. *Clinical Psychology: Science and Practice, 11(3),* 230-241. doi: 10.1093/clipsy.bph077

British Educational Research Association (BERA) (2018). *Ethical Guidelines for Educational Research (4th Ed.)* London. Retrieved from https://www.bera.ac.uk/researchers-resources/publications/ethicalguidelines-for-educational-research-2018

Buckner, J. C., Mezzacappa, E. & Beardslee, W. R. (2009). Self-regulation and its relations to adaptive functioning in low income youths. *American Journal of Orthopsychiatry, 79*(1), 19–30. doi: 10.1037/a0014796

© Victoria Evans, 2021

Chadwick, J. & Gelbar, N. W. (2016). Mindfulness for children in public schools: current research and developmental issues to consider. *International Journal of School & Educational Psychology, 4(*2), 106-112. doi: 10.1080/21683603.2015.1130583

Coholic, D. A. (2011). Exploring the Feasibility and Benefits of Arts-Based Mindfulness-Based Practices with Young People in Need: Aiming to Improve Aspects of Self-Awareness and Resilience. *Child Youth Care Forum, 40,* 303-317. doi:10.1007/s10566-010-9139-x

Cruchon, M. (2009). *The Benefits of Integrating Mindfulness and Yoga in the Elementary Classroom*. Master's Thesis. http://www.spectrum.library.concordia.ca/976621/1/MR63087.pdf

Denscombe, M. (2017). *The good research guide: For small-scale social research projects*, 6th Ed. Maidenhead: Open University Press

Department for Education (DfE) (2019). *Relationships Education, Relationships and Sex Education (RSE) and Health Education Draft statutory guidance for governing bodies, proprietors, head teachers, principals, senior leadership teams, teachers.* Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/781150/Draft_guidance_Relationships_Education__Relationships_and_Sex_Education__RSE__and_Health_Education2.pdf

Felver, J. C., Celis-de Hoyos, C. E., Tezanos, K. & Singh, N. N. (2016). A systematic review of mindfulness-based interventions for youth in school settings. *Mindfulness, 7*(1), 34-45. doi: 10.1007/s12671-015-0389-4

Fjell, A. M., Walhovd, K. B., Brown, T. T., Kuperman, J. M., Chung, Y., Hagler, D., … Dale, A. M. (2012). Multimodal imaging of the self-regulating developing brain. *Proceedings of the National Academy of Sciences, 109*(48), 19620-19625. doi: 10.1073/pnas.1208243109

Garrison Institute. (2005). *Contemplation and education: a survey of programs using contemplative techniques in K-12 educational settings: a mapping report*. Retrieved from https://www.garrisoninstitute.org/wp-content/uploads/2018/11/Contemplation-and-Education_2005.pdf

© Victoria Evans, 2021

Goyal, M., Singh, S., Sibinga, E. M., Gould, N. F., Rowland-Seymour, A., Sharma, R., … Haythornthwaite, J. A. (2014). Meditation programs for psychological stress and wellbeing: A systematic review and meta-analysis. *JAMA Internal Medicine, 174*(3), 357–368. doi: 10.1001/jamainternmed.2013.13018

Greenberg, M. T. & Harris, A. R. (2012). Nurturing Mindfulness in Children and Youth: Current State of Research. *Child Development Perspectives, 6*(2), 161-166. doi: 10.1111/j.1750-8606.2011.00215.x

Gross, J. J. & Thompson, R. A. (2007). Emotion regulation: conceptual foundations. In: Gross, J. J. (Ed.), *Handbook of Emotion Regulation* (pp. 3-24). New York: Guilford Press.

Grossman, P. & Van Dam, N. T. (2011) Mindfulness, by any other name…: trials and tribulations of *sati* in western psychology and science, *Contemporary Buddhism, 12*(1), 219-239. doi: 10.1080/14639947.2011.564841

Hart, R., Ivtzan, I. & Hart, D. (2013). Mind the Gap in Mindfulness Research: A Comparative Account of the Leading Schools of Thought. *Review of General Psychology, 17*(4), 453-466. doi: 10.1037/a0035212

Hess, J. M. (1968). Group interviewing. In: King, R. L. (ed.) *ACR Fall Conference Proceedings* (pp. 193-196). Chicago, IL: American Marketing Association.

Huebner, E. S. (1991). Initial Development of the Student's Life Satisfaction Scale. *School Psychology International*, *12*(3), 231–240. doi: 10.1177/0143034391123010

Huppert, F. A. & Johnson, D. M. (2010). A controlled trial of mindfulness training in schools: The importance of practice for an impact on well-being. *The Journal of Positive Psychology, 5*(4), 264-274. doi: 10.1080/17439761003794148

Johnson, R. B., Onwuegbuzie, A. J. & Turner, L. A. (2007). Toward a Definition of Mixed Methods Research*. Journal of Mixed Methods Research, 1*(2), 112–133. doi: 10.1177/1558689806298224

Kabat-Zinn, J. (1994). *Wherever you go there you are: Mindfulness meditation in everyday life.* New York: Hyperion

Kane, M. (2018). Creating a culture of calm: Mindfulness unfolding in the classroom. *Gifted Education International*, *34*(2), 162–172. doi: 10.1177/0261429417716350

© Victoria Evans, 2021

Kaunhoven, R. J. & Dorjee, D. (2017). How does mindfulness modulate self-regulation in pre-adolescent children? An integrative neurocognitive review. *Neuroscience and Biobehavioural Reviews, 74*(A), 163-184. doi: 10.1016/j.neubiorev.2017.01.007

Krosnick, J.A. (1991). Response strategies for coping with the cognitive demands of attitude measures in surveys. Applied Cognitive Psychology, 5(3), 213-236. doi:10.1002/acp.2350050305

Kuyken, W., Weare, K., Ukoumunne, O. C., Vicary, R., Motton, N., Burnett R., … Huppert, F. (2013). Effectiveness of the Mindfulness in Schools Programme: non-randomised controlled feasibility study. *British Journal of Psychiatry: The Journal of Mental Science, 203*(2), 126–131. doi: 10.1192/bjp.bp.113.126649

Langer, E. J. (1989). *Mindfulness*. Cambridge, MA: Addison-Wesley.

Miller, C. J., Borsatto, J. & Al-Salom, P. (2019). Testing a quick mindfulness intervention in the university classroom. *Journal of Further and Higher Education, 43*(6), 839-847. doi:10.1080/0309877X.2017.1409345

Mindfulness in Schools Project (MiSP) (2015). *Mindfulness in Schools Project*. Retrieved from http://mindfulnessinschools.org/

Napoli, M., Krech, P. R. & Holley, L. C. (2005). Mindfulness training for elementary students: The Attention Academy. *Journal of Applied School Psychology, 21*(1), 99–125. doi:10.1300/J370v21n01_05

Office for Standards in Education (Ofsted). (2019). *The Education Inspection Framework*. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/801429/Education_inspection_framework.pdf

Posner, M. I., Rothbart, M. K., Sheese, B.E. & Tang, Y. (2007). The anterior cingulate gyrus and the mechanism of self-regulation. *Cognitive, Affective, & Behavioral Neuroscience 7*, 391–395. doi: 10.3758/CABN.7.4.391

Public Health England (PHE) (2015). *Measuring Mental Wellbeing in Children and Young People*. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/768983/Measuring_mental_wellbeing_in_children_and_young_people.pdf

© Victoria Evans, 2021

Renshaw, T. L. & Cook, C. R. (2017). Introduction to the Special Issue: Mindfulness in the Schools—Historical Roots, Current Status, and Future Directions. *Psychology in the Schools*, *54*(1), 5-12. doi: 10.1002/pits.21978

Ricarte, J. J., Ros, L., Latorre, J. M. & Beltrán, M.T. (2015). Mindfulness-based intervention in a rural primary school: Effects on attention, concentration and mood. *International Journal of Cognitive Therapy, 8*(3), 258-270. doi: 10.1521/ijct_2015_8_03

Roeser, R. W. & Peck, S. C. (2009). An Education in Awareness: Self, Motivation, and Self-Regulated Learning in Contemplative Perspective. *Educational psychologist, 44*(2), 119–136. doi: 10.1080/00461520902832376

Roeser, R. W., Schonert-Reichl, K. A., Jha, A., Cullen, M., Wallace, L., Wilensky, R., … Harrison, J. (2013). Mindfulness training and reductions in teacher stress and burnout: Results from two randomized, waitlist-control field trials. *Journal of Educational Psychology, 105*(3), 787–804. doi: 10.1037/a0032093

Sawyer, S. M., Afifi, R. A., Bearinger, L. H., Blakemore, S. J., Dick, B., Ezeh, A. C. & Patton, G. C. (2012). Adolescence: A foundation for future health. *The Lancet*, *379*(9826), 1630-1640. doi: 10.1016/S0140-6736(12)60072-5

Schatz, C. (2011). *Mindfulness meditation improves connections in the brain.* Retrieved from http://www.health.harvard.edu/blog/mindfulness-meditation-improves-connections-in-thebrain-201104082253

Schonert-Reichl, K.A. & Lawlor, M.S. (2010). The Effects of a Mindfulness-Based Education Program on Pre- and Early Adolescents' Well-Being and Social and Emotional Competence. *Mindfulness, 1*, 137-151. doi: 10.1007/s12671-010-0011-8

Semple, R. J., Droutman, V. & Reid, B. A. (2017). Mindfulness goes to School: Things learned (so far) from research and real-world experiences. *Psychology in the Schools, 54*(1), 29-52, doi: 10.1002/pits.21981

Singh, N. N., Lancioni, G. E., Singh Joy, S. D., Winton, A. S. W., Sabaawi, M., Wahler, R. G. & Singh, J. (2007). 'Adolescents with conduct disorder can be mindful of their aggressive behaviour'. *Journal of Emotional and Behavioural Disorders*, 15(1), 56–63. doi:10.1177/10634266070150010601

© Victoria Evans, 2021

Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, S., Secker, J. & Stewart-Brown, S. (2007). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): development and UK validation. *Health and Quality of Life Outcomes*, *5*(63), doi: 10.1186/1477-7525-5-63

The Children's Society. (2014). The Good Childhood Report 2014. Retrieved February 19, 2020 from www.childrenssociety.org.uk/what-we-do/research/wellbeing-1/good-childhood-report-2014

Vago, D. R. & Silbersweig, D. A. (2012). Self-awareness, self-regulation, and self-transcendence (S-ART): a framework for understanding the neurobiological mechanisms of mindfulness. *Frontiers in Human Neuroscience, 6,* 296. Retrieved from https://doi.org/10.3389/fnhum.2012.00296

Vaughn, S., Schumm, J. S., & Sinagub, J. M. (1996). *Focus group interviews in education and psychology.* Sage.

Viegas, M. (2005). *Relax Kids: The Wishing Star. 52 Meditations for Children (Ages 5+).* Alresford, Hampshire: Our Street Books

Viegas, M. (2014a). *Relax Kids: Pants of Peace. 52 Meditations tools for children.* Alresford, Hampshire: Our Street Books

Viegas, M. (2014b). *Relax Kids: Aladdin's Magic Carpet and other Fairytale Meditations for Children.* Alresford, Hampshire: Our Street Books

Weare, K. & Huppert, F. (2019). Mindfulness and Education. *obo* in Psychology. doi: 10.1093/obo/9780199828340-0236

Wilde, S., Sonley, A., Crane, C., Ford, T., Raja, A., Robson, J., Taylor, L. & Kuyken, W. (2019). Mindfulness Training in UK Secondary Schools: a Multiple Case Study Approach to Identification of Cornerstones of Implementation. *Mindfulness 10*, 376–389. Retrieved from https://doi.org/10.1007/s12671-018-0982-4

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