

Mindfulness in the educational system: To be or not to be?

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Abstract

This paper reviews evidence relating to the effects of meditative and mindfulness-based practices on young people, focusing specifically on sixteen reports and reviews, and eight individual studies. It discusses the origins of meditation and the place of these ancient techniques in present day society. Mindfulness meditation is used in both clinical and educational settings and, while both are examined here, particular attention is given to interventions incorporated into different levels of education. Though current research shows the potential of mindfulness to develop the whole person and to improve the learning experience, this research has limitations. This paper examines these caveats and explores suggestions for how to gather empirical evidence going forward.

Key words: *Mindfulness meditation children adolescents health wellbeing
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Introduction

Meditation and mindfulness, previously concepts and practices more commonly associated with the East, are today growing in popularity in the West. Life is stressful. Longer commutes, more intense workloads and information overload from digital devices are placing strain on our overall health. Misra and Stokols (2012) compare the benefits and drawbacks of living in an age of rapid technological development. “Electronic information and communication technologies have provided individuals and organizations unprecedented opportunities to broaden their social and professional networks, access large amounts of information, and ease the constraints of time and place. At the same time, however, these advanced technologies have imposed certain behavioral and psychological burdens on people” (p. 738). The human body may be more productive with short bursts of ‘good’ stress but repeated situations of ‘bad’ stress can contribute to hormone imbalance and to compromised immune systems, over time. Napoli et al. (2005) elaborate. In ‘fight or flight’ mode the midbrain engages and more complex cognitive processing become constrained. One becomes less focused, more reactive and potentially less emotionally regulated.

Young people are subject to the same lifestyle and environmental stressors as adults. They too experience the negative effects of fast-paced living, violence in the media, and the breakdown of traditional structures in society (Rempel, 2012). As a result, many arrive in school and college each day distracted and often overwhelmed. Broderick and Metz (2009) report that mental health issues are on the rise among children and adolescents in the US, “possibly reflecting greater awareness of disorders (Achenbach, 1995) and also resulting from the increased number and intensity of stressors on young people (Caspi et al., 2000)” (p. 35). Semple and Lee (2008) explain that anxiety disorders are the most common mental health condition among young people today and if, left untreated, those suffering will see their education adversely affected.

Indeed, mental health internationally has become a much talked about topic among celebrities, in the media and at official level, and there is greater acknowledgment of the stilling of the mind that mindfulness may offer. Reports suggest that the practice is being incorporated more frequently into a variety of spheres and that employers, educationalists and politicians are making recourse to mindfulness based research

(Woods, 2014). The Mindful Nation UK Report (2015) argues for the inclusion of mindfulness in work and school, and US defense policy now offers the option of mindfulness training to marines about to deploy.

The World Economic Forum puts great emphasis on the way that learning takes place. The organization (2015) states that education is what educators do to enable students to flourish and lists the ability to manage one's attention as a key attribute in the 21st century. Concentration, a mental muscle, is strengthened with regular practice. Potentially the inclusion of mindfulness meditation in the education system, not as an add-on to an already overburdened curriculum but as innovative approach to learning, may allow young people to achieve more academically and to find greater personal fulfillment.

Theoretical perspectives on meditation

The English word meditation stems from the Latin 'meditatio', and suggests a physical and mental exercise that is contemplative in nature. Though styles of meditation vary they can be categorized as mindful, receptive, generative and reflective (Fisher, 2006). According to Fisher (2006) "mindfulness always plays a part in meditation" (p. 147), and mindful meditation commonly uses the breathe and breathing techniques to clear the mind. Receptive meditation entails focus on a still object, a physical sensation or a mantra, while generative meditation, often involving visualization, is more guided. The fourth category, reflective meditation, encourages repeated attention turning to a word or sensory stimulus and openness to whatever response arises within. A meditation practice may combine elements of all the above-mentioned approaches but will usually place particular emphasis on just one (Fisher, 2006). The studies reviewed in this article use a range of meditative techniques combined for intended maximum effect. Mindfulness-based stress reduction (MBSR) and Tai Chi (Wall, 2005), breath work and sensory motor awareness (Napoli, Krech, & Holley, 2005), meditation and breathing (Flook, Smalley, Kitil, Galla, Kaiser-Greenland, Locke, Ishijima, & Kasari, 2010), mindfulness-based cognitive therapy for children (MBCT-C) and yoga (Semple & Lee, 2008) are but some of the combinations employed. Consensus prevails on the potential effectiveness of

combining, with the exceptions of Thompson and Gauntlett-Gilbert (2008) who urge separation of meditative techniques.

Use of mindfulness-based meditative practices and their effectiveness with young people is the focus of this article. Kabat-Zinn defines mindfulness as “paying attention in a particular way: on purpose, in the present moment, and non-judgementally” (1994, p. 4). Semple and Lee (2008) explain mindfulness practice in terms of attention-training techniques, and qualify this very particular type of attention as accepting, present-focused and intentional (Wall, 2005).

The increasingly secular nature of mindfulness teaching and practice today notwithstanding (Thompson & Gauntlett-Gilbert, 2008; Mendelson, Greenberg, Dariotis, Gould, Rhoades, & Leaf, 2010), mindfulness has strong religious and spiritual roots (Rempel, 2012; Semple & Lee 2008; Kabat-Zinn, 2003). Semple and Lee (2008) apply the teachings of Buddha to the 21st century and explain how skewed outcomes-based thinking may be the cause of much anxiety. Thompson and Gauntlett (2008) talk of living in a mindless way, operating in a mode akin to autopilot, oblivious to factors determining our actions. In this context, mindfulness can shed light on the human predicament. It can increase self-awareness, give mental clarity and alleviate stress, serving as “more than a tool; it is a way of being in the world and understanding the world” (Rempel, 2012, p. 202).

Potential benefits of mindfulness for young people

Rempel’s stance that mindfulness practice can bring mental health benefits is echoed in much of the literature with an adult research base. Baer (2003) suggests that mindfulness can develop socio-emotional skills and offer inner stability in highly charged environments, particularly if practiced in everyday life (Semple & Lee, 2008).

Furthermore, it can positively affect areas of learning and cognition, improving attention (Yuan Tang, Ma, Wang, Fan, Feng, Lu, Yu, Sui, Rothbart, Fan, & Posner, 2007) and favorably altering brain functioning (Davidson & Lutz, 2008). Physically the effects can be felt in reduced cortisol levels and improved sleep (Baer, 2003). Though some research has proven inconclusive (Fisher, 2006) and methodological inadequacies have been identified (Thompson & Gauntlett-Gilbert, 2008), Weare (2012) suggests “that there is

reasonably strong evidence for the impact of mindfulness on a wide range of mental and physical health conditions, social and emotional skills and wellbeing, and on learning and cognition” (p. 2). That research-based evidence continues to grow.

Research and evaluation of mindfulness-based interventions with young people is at a very early stage (Broderick & Metz, 2009; Semple & Lee, 2008). Existing studies with children and adolescents have been somewhat undermined by issues of small numbers, self-reporting, bias as participants volunteer, lack of standardized measures and, in some instances, absence of control groups (Weare, 2012). In this context, it is necessary to draw cautious conclusions and to work towards designing more controlled studies. However, one should also remain open to the existing work of researchers who maintain that, with modifications, mindfulness-based interventions may provide the same benefits for young people as for adults.

In the writing of this paper six studies employing mindfulness-based interventions and meditative techniques with young people were explored (Wall, 2005; Semple & Lee, 2008; Broderick & Metz, 2009; Napoli et al., 2005; Flook et al., 2010; Mendelson et al., 2010). Two studies with third level students were also considered (Yuan Tang et al., 2007; Glanville, Washima, & Becker, 2014), and the author of this paper acknowledges the low number of interventions at higher education. However, this literature review has accentuated the opportunity to develop mindfulness at third level and has provided thought-provoking material concerning implementation.

There was consensus among authors of articles reviewed that such approaches are acceptable and feasible to this sector of the population, and have the potential to deliver overall health improvements to school going children. Flook et al. (2010) found that the introduction of Mindfulness Awareness Practices (MAPs) 30 minutes twice weekly improved the executive function of 65 participants aged 7-9 years old. Wall (2005) describes suggested benefits of greater self-care, less reactivity and increased self-awareness among the young people aged 11-13 years who took part in his 5-week Mindfulness-Based Stress Reduction (MBSR) and Tai Chi project. In addition, Broderick and Metz (2009) reported, relative to controls, that 120 teenage girls experienced more emotional regulation after engaging in the mindfulness meditation of their 12-session study. Napoli et al. (2005), Semple and Lee (2008) and Mendelson et al.

(2010) conducted separate studies on interventions to alleviate stress and anxiety in young people, and all concluded that combinations of yoga, breath work, visualization and Mindfulness-Based Cognitive Therapy (MBCT) have the potential to deliver promising results.

Mindfulness for young people: modifications

Thompson and Gauntlett-Gilbert (2008) remind that children are not “little adults” and that between both there are clear differences in “attentional, cognitive, and interpersonal functioning” (p. 399). It is important, therefore, that mindfulness programs for adults are modified when employed with young people. They must be developmentally sound, and may draw on the Piagetian framework for comparative cognitive studies. In this, Piaget describes the formal operations stage of development and the concrete operations stage, both of which are relevant to discussions of age and ability in mindfulness teaching. In the formal operations stage children, usually aged-12, are able to think in abstract terms and have progressed from the concrete operations stage (approximately 7-12 years). They have the skills to imagine the future and through mindfulness-based programs appropriate for their years, can develop strategies to manage more effectively in hypothetical scenarios (Wall, 2005). Yet, it seems that participants of a younger age can benefit too and cognitive-based therapy (CBT) has been used effectively in clinical settings with children between 7-12 years. Advocates identify this as an age of greater self-awareness, where habits can be modified and simple metaphors employed meaningfully (Thompson & Gauntlett-Gilbert, 2008).

For the most part mindfulness-based techniques have good flexibility and interventions employed with adults can be adapted for use with young people. Skills sessions are shorter, group gatherings more frequent, and parts of practice repeated, (Wall, 2005; Semple & Lee, 2008). Semple and Lee (2008) offer an explanation of MBCT for children. “MBCT for children is a downward adaptation of MBCT” (p. 66). “MBCT-C uses a variety of multisensory exercises that give children maximum experience of practice in mindfully experiencing their world via sight, touch, taste, sound, smell and kinesthetic” (p. 68). Through activities that may include drawing a picture,

touching a flower, tasting a meal, and perhaps listening to a bell children can savor the present moment with greater calm and increased awareness.

Mindfulness in the education system

The World Health Organization (2013) estimates that mental issues will place the greatest burden on health care resources within the next 15 years. Throughout the literature reviewed, the theme of building young people's resistance to stress is discussed. These discussions take root in the expanding research base that indicates that childhood and adolescence are critical life stages in which to develop resistance skills as part of long-term prevention (Broderick & Metz, 2009). In this context, educators are taking a greater interest in young people's socio-emotional wellbeing. While the principal role of the education system remains preparing students for the world of work, greater focus is now being placed on developing the whole person during the course of academic pursuits. Schools and colleges are ideally placed to do that. They exist in partnership with the young people that spend much of their day in their care, for whom learning can be more focused and meaningful in a supportive and progressive environment. Today educational institutions are "in the position of influencing students' socio-emotional and behavioural development in ways that educators did not see in previous generations" (Rempel, 2012, p. 201). However, to do that teachers and lecturers need the tools to teach young people emotional-regulatory strategies to deal constructively with stressful situations. Teachers and lecturers seek ways to help students diffuse the negative effects of environmental stressors and focus fully on classroom activities in the present moment (Napoli et al., 2005). Teachers and lecturers require an understanding of methods with the potential to develop in students' greater awareness of self and others in a frenetic world (Wall, 2005; Mendelson et al., 2010). Mindfulness training may be a core component of that toolkit (Shapiro et al., 2008).

Mindfulness in the education system: key considerations

The pedagogical argument for the inclusion of mindfulness mediation in the education system is gaining strength. Existing research suggests that mindfulness training not only benefits students mentally and physically but also positively affects how and what they

learn. Importantly, it is a natural, cost neutral technique, proven to be feasible and acceptable to young people (Weare, 2012; Flook et al., 2010; Semple & Lee 2008; Burke, 2009), and as part of a whole institute prevention program it can address universal susceptibilities as opposed to specific issues (Rempel, 2012). However, the literature pinpoints three key considerations when using mindfulness interventions in educational settings. The first consideration centers on training with strong emphasis on educators as practitioners of mindfulness. According to Kabat-Zinn (2003) “mindfulness cannot be taught to others in an authentic way without instructors practicing it in his/her own life” (p. 149). Wall (2005) refers to facilitators’ daily practice, and Broderick and Metz (2009) to instructors’ deep understanding of mindfulness. Indeed, all the authors reviewed agreed on the need for educators’ established, ongoing practice with the exception of Fisher (2006) who maintains that training is not necessary.

Consideration number 2 revolves around parental and community involvement.

Community, as a collective term, refers to those involved in providing support services to all students in education. To ensure that mindfulness practice is more meaningful, and its positive effects felt in many areas of the young person’s life links with home and pastoral teams ought to be established. This may involve information sessions for parents prior to mindfulness training implementation (Broderick & Metz, 2009), written permission for children under the age of 18 (Wall, 2005), and parental input via pre- and post- program questionnaires (Flook et al., 2009). At higher education, this may include talks at open evenings for students transitioning from secondary school, and parental consent for under-18 students engaging in mindfulness intervention. While respect for the Buddhist origins of mindfulness should be maintained, Mendelson et al. (2010) advises that explanations to parents and participants be cushioned in secular language:- “The instructor did not use terminology that would be considered religious or unusual for this cultural context” (p. 989). In many programs mindfulness practice is extended into the home via workbooks (Broderick & Metz, 2009), mindful daily routines including mealtimes (Wall, 2005), and mindful parenting attitudes (Semple & Lee, 2008). Indeed Thompson and Gauntlett-Gilbert (2008), drawing on the teachings of Kabat-Zinn (1997), write that mindfulness may be an effective aid to parenting.

The third and final consideration focuses on curriculum. This is an area of great interest, and merits careful study in order to take mindfulness practice in schools and colleges into the future. Research suggests that including stress reduction programs into the school curriculum is linked to improved attention, wellbeing and self-esteem (Napoli et al., 2005). However, of the eight studies reviewed in this paper only Napoli et al. (2005) succeeded in having their 24-week training ‘Attention Academy Program’ implemented into the curriculum, as part of physical education (PE) class. In the United Kingdom, the Mindfulness in Schools Program (MISP) exists. This non-profit organization delivers 8-week mindfulness programs in schools, and in 2010 contributed to the introduction of mindfulness in the curriculum of two British secondary schools, Tonbridge School and Hampton School. MISP’s influence has extended to Ireland where in conjunction with The Sanctuary, Stanhope Street, Dublin, it has trained hundreds of Irish-based educators in the past four years.

It could be argued that the Irish curriculum is innovative in its promotion of student wellbeing, weaving the theme through all levels of the educational system. In the early years, *Aistear: The Early Childhood Curriculum Framework* counts ‘Wellbeing’ among its four core pillars, and states that “the theme of Wellbeing is about children being confident, happy and healthy. Wellbeing focuses on developing as a person. It has two main elements: psychological wellbeing (including feeling and thinking) and physical wellbeing” (p. 16). In primary school, the theme permeates the Social, Personal & Health Education (SPHE) subject. However, it is perhaps at second level that students’ physical, mental, emotional and social wellbeing appears most prominently with 300 timetabled hours enshrined in the Junior Certificate curriculum for 12-15 year olds. The Irish Economic and Social Research Institute (ESRI) findings inform this new curricular addition: - “Children with higher levels of behavioral, social and school wellbeing had higher levels of achievement subsequently (at ages 11, 14 and 16) -” (Smyth, 2015, p. 4). Like Rempel (2012), Weare (2012), and other authors discussed in this article, the National Council for Curriculum and Assessment (NCCA) asserts that schools have a critical role to play in educating young people about wellbeing and supporting them in their achievement of it. “Wellbeing matters not simply because it leads to better educational outcomes or can influence young people’s outcomes as adults. Wellbeing

matters in the here and now” (NCCA, 2017, p. 10). The NCCA accentuates the importance of teacher self-reflection and the need for consistent parental consultation. It talks of workshops to engage whole staff. Notably, mindfulness is an element of this wellbeing promotion program, which also includes retreats, philosophical discussions and self-care skills. At third level, there is scope to include interventions in core modules linked to skills for success and students’ personal development.

Conclusion

The research reviewed in this paper suggests that mindfulness may positively affect young people mentally, physically, socially and emotionally. It has the possibility of increasing their awareness of self and others, and equipping them with life skills to deal more calmly and effectively with stressful situations. In an educational context mindfulness-based training has been shown to be acceptable and feasible (Rempel, 2012). It can improve the teaching and learning experience, allowing students to be less distracted and present. In addition, it can create positive changes in the classroom, the lecture theatre, the school, the campus, the home, communities and society as a whole.

The research is promising but, as stated previously, it is in the initial stages. It has its limitations (Mendelson et al., 2010). That “there is no general empirical evidence of the efficacy of these intentions” concerns Burke (2009, p. 133). It is a well-founded concern as small sample sizes and absence of control groups are flaws of many of the studies reviewed in this article. So too are possible biases in selection of participants and reporting by parents in the case of participants under the age of 18 years. How best to advance the essential empirical research, therefore? It is vital that larger, methodologically sound studies are designed, and randomized control groups are used (Burke, 2009; Rempel, 2012). This more stringent approach to collecting empirically sound evidence will bolster the argument in favour of using mindfulness with young people. According to Frederick Douglass (1855) “it is easier to build strong children than to repair broken adults.” Though the social reformer spoke these words more than one hundred and fifty years ago, their essence still rings true. In a world of challenges and

constant change, the capacity to manage one's attention and to show resilience is key. Mindfulness may provide a way for our young people to do that.

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