

# **FEATURE**

Mental health promotion for young people - the case for yoga in schools

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# Mental health promotion for young people - the case for yoga in schools

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#### **Background**

Mental wellbeing among young people is deteriorating. It is widely accepted that perceived stress, when not managed, may be a cause of mental ill-health. Conditions such as anxiety and depression can continue into adulthood (Suldo *et al*, 2008). This is a major public health concern. Given that costly treatments are often not accessed, or are ineffective, the need to improve young people's mental health with a more preventative approach is of the utmost importance.

Long consigned to the backwaters, mental health has recently attained greater prominence (Herman et al., 2017; Marmot & Bell, 2012; Layard, 2006). Mental wellbeing is stated as a fundamental component of the World Health Organisation's definition of health. It is predicted that the estimated cumulative global impact of mental disorders on lost economic output will amount to US\$16.3 billion between 2011 and 2030 (WHO, 2013). Perceived stress can also lead to poor health-related choices such as smoking, drinking and unhealthy eating; and chronic stress can lead to disease as a result of compromised immune and cardiovascular systems (McEwan, 2008). For example, across the UK, 850,000 young people aged 5–16 have mental health problems; three children in every classroom have a diagnosable mental health disorder (YoungMinds, 2017). The recent international World Health Organisation report *Health Behaviours in School-Aged Children* compared the health of children in 42 European and North American countries. It concluded that Scotland had a significantly greater proportion of 15-year-old girls who reported being stressed (Inchley *et al.*, 2016). This finding highlights a serious problem for Scottish adolescents' mental health, and it is this group – Scottish adolescents – who will be specifically addressed in this paper.

There are many causes of stress facing young people. For instance, Adverse Childhood Experiences (ACEs) are widespread in Scotland. An exploratory analysis of the *Growing Up in Scotland* study found that as many as two-thirds of children have experienced more than one ACE; and three or more ACEs have been experienced by 10% of children (Marryat & Frank 2017). In England and Wales, by adulthood, 50% of all adults have experienced more than one ACE, with 8% in England and 14% in Wales reporting four or more ACEs (Bellis *et al.*, 2014; Bellis *et al.*, 2017). As exposure to ACEs increases, so do the prevalence and risk of depressed mood and suicide attempts, as well as other indicators of poorer mental and physical outcomes (Felitti *et al.*, 1998). Puberty in general is a period that heralds great psychological and biological changes which can cause stress. Young people are also dealing with a range of

pressures: those arising from family life; having to succeed academically; to be popular; and to have a fit or slim body (Hagan & Nayar, 1998). Additionally, from the moment they wake up until the moment they fall asleep, the majority of young people are bombarded with advertising imagery and messages which convey an ideal identity, one to which young people compare themselves. A principal outcome of this advertising is to create feelings of inadequacy and dissatisfaction, which in turn provoke further desires to buy those products which promise to provide a renewed feeling of adequacy and satisfaction. But satisfaction is always temporary. Herein lies a paradox in our consumer culture: our constant consumption may create or reinforce those very anxieties and stresses which it purports to assuage (Knights & Morgan, 1993). All considered, it is little wonder that young people are experiencing such high levels of perceived stress. These stress levels not only affect their mental health, but also hamper their school experience and performance (Hagen, 2009). Indeed, evidence suggests that stress impairs learning (*ibid*).

The purpose of the argument presented in this paper is to open up a discursive space for a further consideration of the relationship between schooling and mental health. How can schools foster mental wellbeing amongst their pupils, thereby reducing perceived stress? Should a more formal place in the school curriculum be assigned to teaching specific stress-reduction skills – for example yoga – which may enable pupils to reduce their stress levels and better learn and flourish? Specifically, the article will explore how the practice of yoga has the potential to minimise stress, an outcome which is now strongly supported by scientific research. In support of this assertion, the evidence in the literature of research into the benefits of yoga in society and school contexts is examined, with particular reference to the UK and the US. The argument will show that yoga could and should be integrated formally into the school curriculum. If implemented, there is strong evidence that it would constitute an important preventative public health measure for Scotland's young people.

### Coping with stress: the research-based benefits of yoga in society and schools

Many mind-body practices offer healthy ways to deal with stress. One of the most popular and well-researched of these is yoga, a multi-component holistic system of practices that typically includes physical postures, breath-work, deep-relaxation meditation/mindfulness practices. It may be useful here to distinguish yoga from mindfulness, which has attracted much recent interest (see, for example, Mindfulness All-party Parliamentary Groups, 2015). Mindfulness focusses on cultivating non-judgemental awareness towards the present moment: bodily sensations, thoughts and the immediate environment. Mindfulness is 'the ability to pay attention to the present moment, on purpose' (Kabat-Zinn, 2003, p.20). Yoga is also about present-moment awareness and is an inherently mindful practice, but crucially yoga practice goes beyond this. It involves various techniques to help improve the quality of those bodily sensations and thoughts. It poses the question: why would a person merely wish to be mindfully aware of the present moment - bodily sensations and thoughts - if it is

uncomfortable or painful? Yoga techniques such as postures and breathing are simple and effective ways of improving the comfort and quality of our experience. If you are a teenager experiencing a bad mood, lethargy and a headache, it is unlikely you will be motivated to sit in mindful meditation. However, if you engage in a short practice of tailored yoga postures and yoga breathing this will alleviate these complaints. In sum, yoga delivers similar health benefits to mindfulness in terms of mood improvement and stress reduction (Chong, et al, 2011; Khalsa & Cope, 2006); however, because yoga also involves breath regulation and posture, it has wider-ranging and more pronounced physiological effects, including addressing chronic conditions such as cardiovascular disease, diabetes, obesity and respiratory conditions. It does so in a manner that mindfulness cannot.

Research documenting the therapeutic benefits of yoga has grown steadily for the past three decades and now includes controlled clinical trials on a variety of mental health conditions such as depression and anxiety (Field, 2011; Khalsa & Cope, 2006). A meta-analysis of yoga research suggests that 'a growing body of evidence states that yoga benefits physical and mental health via down-regulation of the hypothalamic-pituitary-adrenal (HPA) axis and the sympathetic nervous system' (Ross & Thomas, 2010, p. 3). In short, practising yoga reduces stress and the associated discomfort of stress-related symptoms, thereby negating the need to self-medicate by drinking, drug-taking, over-eating and technological distraction.

With such a robust body of research showing the benefits of practices like yoga on the reduction of stress and the promotion of good mental health (among other benefits) it is little wonder that these practices are becoming increasingly popular. For example, the US National Center for Health Statistics states that, among US adults, the reported use of yoga within the previous 12 months was 5.1 per cent in 2002, 6.1 per cent in 2007 and 9.5 per cent in 2012; and similarly so for children for the period 2007-12 (Black *et al.*, 2015, p.7). That said, access to these practices is not equal, as is highlighted in the emerging socio-economic differences in yoga expenditure. A systematic review reported that both in the US and the UK yoga practitioners are generally white and of higher socioeconomic status (Park *et al.*, 2015, p.469). Therefore, yoga classes are currently unaffordable for many: those without disposable income, including many young people, are not in a position to attend them. It is for this reason that in order for a larger proportion of the population to access the benefits of yoga, financial barriers must be removed.

The main proposition here is to recommend a publicly-funded yoga programme in schools (Brooks, 2014). Teaching yoga in schools is the most effective and cost-effective way to provide a preventative resource for young people to access the mental-health benefits of yoga. Yoga has already been recommended and used clinically for young people, particularly in the United States. Birdee *et al.*'s (2009) systematic review of the benefits of yoga in the paediatric population reported many benefits, both mental and physical. In particular, yoga has

demonstrated benefits for young people in the following areas: stress, anxiety and depression; cognitive function, memory and perception; flexibility; cardiopulmonary fitness; psychomotor and neuromuscular performance; and weight loss (Childress *et al.*, 2015). Whilst acknowledging these many benefits of yoga for young people, this paper will focus on mental health promotion, and on the reduction of perceived stress, anxiety and depression.

Other recent research on yoga in school settings suggests that yoga is a viable and potentially efficacious strategy for improving adolescent health (Khalsa & Butzer, 2016; Ferreira-Vorkapic et al., 2015; Hagen & Nayar, 2014). In fact, yoga programmes in schools are already taking place. The most recent audit from the US reported that there are 36 school-based yoga programmes (Butzer *et al.*, 2015). These schools have recognised that educating the whole child (including their mental, emotional and physical health), in addition to teaching academic skills, is important. In essence, academic achievement is affected by, and is dependent upon, young people's health, both physical and mental: by reducing young people's stress levels, we can improve their learning. When the parasympathetic nervous system is activated, as it is in yoga, focus and concentration are increased and, as a result, yoga has been shown to improve academic performance and school grades (Butzer *et al.*, 2015; Kauts & Sharma, 2009).

In England, a pioneer yoga-in-schools programme was commissioned in 2016 by the London Borough of Havering in order to address the mental health needs of both teachers and pupils. The programme, Mindfulness for Mental Health and Resilience, has already shown a significant positive change in the mental well-being of the participants (Schnackenberg, 2016). Although this is called a 'mindfulness' programme, it in fact comprises mainly 'moving mindfulness' - that is, yoga – with its inclusion of yoga breathing and yoga postures along with mindfulness. Most importantly here is the programme's novel approach to addressing both the teacher's and the pupils' mental health. Of particular note is the fact that the yoga practices taught are short one to ten minutes – and are incorporated into the school day. Crucially, the programme does not require that yoga skills are taught instead of other physical education classes, but rather are taught across the curriculum, as and when the teachers deem it to be appropriate. To date, whilst some schools do provide yoga it is in the form of ad hoc after-school clubs or as an option within physical education. But, given its benefits, the teaching of yoga may warrant a place in the school curriculum. A robust and well-researched programme of yoga interventions in schools could prove very beneficial, and may go a long way towards successfully addressing those challenges faced by young people which impact negatively on their mental health.

It is worth noting that, in the 'west', yoga may be viewed as a feminine practice. Accordingly, if required, it might be appropriate to engage young males, perhaps by encouraging visits from local sportsmen who practise yoga.

# Conclusion

It has been argued that unmanaged stress among young people may cause mental health problems now and in later life. The provision of preventative stress-reduction skills in schools is a priority for young people's health. This paper also suggested that among the potential stressors these young people face may be the values promoted by consumer culture, particularly individualism. Thus, an apparent paradox regarding yoga must be outlined and made clear. For those unfamiliar with it, yoga could be considered to be a practice that promotes that very self-centred individualism which has been shown to be a key stressor. After all, the locus of the practice is the individual. However, an overall effect of a yoga practice is an awareness of the connection to everything that is not you, the individual (Khalsa, 2016). It may result in the realisation that a positive mental state is not to be found in the values and practices promoted by consumerism but rather in the meaningful connection with others and the wider world. Indeed, Hagen and Nayar (2014) suggest that yoga can enable a greater social sensitivity – so much so that, by teaching yoga in schools, we may increase the likelihood of young people engaging in civic activities and shaping a more equal society.

Given the reported benefits of yoga-skills teaching in the US and elsewhere, further consideration of its broader adoption in the school curriculum is warranted, thereby paving the way for a robust and effective preventative approach to reducing stress and improving mental health among young people. As a first step, collaborative research is required which will develop an appropriate and effective yoga-skills programme that is suitable for the respective school population such that it would be easily embedded in the school curriculum. Programmes may take their cue from the yoga-in-schools programme commissioned in 2016 in England by the London Borough of Havering (referred to earlier) in order to address the mental health needs of both teachers and pupils. In the wake of the recent explosion of understanding about ACEs and Scotland's declaration to become an ACE-aware nation, an investment along the lines proposed here would provide the urgently needed stress-reduction skills and could improve the childhood experiences of generations to come.

#### References

BELLIS, M.A., HUGHES, K., LECKENBY, N., PERKINS, C. and LOWEY, H., (2014) National household survey of adverse childhood experiences and their relationship with resilience to health-harming behaviors in England. *BMC Medicine*, **12**(1), p.72.

BELLIS, M., ASHTON, K., HUGHES, K., FORD, K., BISHOP, J. and PARANJOTHYI, S., (2015) Welsh Adverse Childhood Experiences (ACE) Study. *Adverse childhood experiences and their impact on health-harming behaviours in the Welsh adult population. NHS Wales*. Available from:

http://www2.nphs.wales.nhs.uk:8080/PRIDDocs.nsf/7c21215d6d0c613e80256f490030c05a/d 488a3852491bc1d80257f370038919e/\$FILE/ACE%20Report%20FINAL%20(E).pdf (Date accessed: December 10<sup>th</sup>, 2017)

BIRDEE, G.S., LEGEDZA, A.T., SAPER, R.B., BERTISCH, S.M., EISENBERG, D.M. and PHILLIPS, R.S., (2008) Characteristics of Yoga Users: Results of a National Survey. *Journal of General Internal Medicine*, **23**: pp.1653–8.

BLACK, L.I., CLARKE, T.C., BARNES, P.M., STUSSMAN, B.J. and NAHIN, R.L. (2015) *Use of complementary health approaches among children aged 4–17 years in the United States: National Health Interview Survey, 2007–2012.* Available from: https://www.cdc.gov/nchs/data/nhsr/nhsr078.pdf (Date accessed: December 12<sup>th</sup>, 2017).

BROOKS, F. (2014) *Public Health England Briefing: The Link Between Pupil Health and Wellbeing and Attainment.* Available from:

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/370686/HT\_bri efing\_layoutvFINALvii.pdf (Date accessed: March 6<sup>th</sup> 2018).

BUTZER, B., VAN OVER, M., NOGGLE TAYLOR, J.J. and KHALSA, S.B.S. (2015) Yoga may mitigate decreases in high school grades. *Evidence-Based Complementary and Alternative Medicine*. August 10.

CHILDRESS, T.M. and HARPER, J.C. (2015) Best Practices for Yoga in the Schools. Yoga Service Best Practices Guide. Vol. 1. Atlanta, GA: Yoga Service Council/YSC-Omega Publications.

CHONG, C.S., TSUNAKA, M. and CHAN, E.P. (2011) Effects of yoga on stress management in healthy adults: a systematic review. *Alternative Therapies in Health and Medicine*, **17**(1), p.32.

FELITTI, V.J., ANDA, R.F., NORDENBERG, D., WILLIAMSON, D.F., SPITZ, A.M., EDWARDS, V., KOSS, M.P. and MARKS, J.S. (1998) Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. *American Journal of Preventive Medicine*. **14**(4), pp. 245-58.

FERREIRA-VORKAPIC, C., FEITOZA, J.M., MARCHIORO, M., SIMOES, J., KOZASA, E. and TELLES, S. (2015) Are there benefits from teaching yoga at schools? A systematic review of randomized control trials of yoga-based interventions. *Evidence-Based Complementary and Alternative Medicine*. September 28.

FIELD, T., (2011) Yoga clinical research review. *Complementary Therapies in Clinical Practice*. **17**(1), pp.1–8.

HAGEN, I. and WOLD, T., (2009) The media generation: children and young people in the new media landscape. Oslo: Samlaget.

HAGEN, I. and NAYAR, U.S. (2014) Yoga for children and young people's mental health and well-being: research review and reflections on the mental health potentials of yoga. *Frontiers in Psychiatry*, **5**, p.35.

HERRMAN, H., SAXENA, S. and MOODIE, R., WORLD HEALTH ORGANIZATION (2005). 
Promoting mental health: concepts, emerging evidence, practice: a report of the World Health 
Organization, Department of Mental Health and Substance Abuse in collaboration with the 
Victorian Health Promotion Foundation and the University of Melbourne. Available from 
<a href="http://apps.who.int/iris/bitstream/10665/43286/1/9241562943">http://apps.who.int/iris/bitstream/10665/43286/1/9241562943</a> eng.pdf (Date accessed: 
October 17th, 2018)

INCHLEY, J., CURRIE, D., YOUNG, T., SAMDAL, O., et al. (2016) Growing up unequal: gender and socioeconomic differences in young people's health and well-being. Health Behaviour in School-aged Children (HBSC) study: international report from the 2013/2014 survey. [Health Policy for Children and Adolescents, No. 7.] Available from <a href="http://alkoholdialog.dk/wp-content/uploads/2016/08/HBSC-2016.pdf">http://alkoholdialog.dk/wp-content/uploads/2016/08/HBSC-2016.pdf</a> (Date accessed: October 17th, 2018)

KABAT-ZINN, J. (2003) Mindfulness-based interventions in context: past, present, and future. *Clinical Psychology: science and practice.* **10**(2), pp.144-56.

KAUTS, A. and SHARMA, N. (2009) Effect of yoga on academic performance in relation to stress. *International Journal of Yoga*, **2**(1), p.39.

KHALSA, S.B.S. and COPE, S. (2006) Effects of a yoga lifestyle intervention on performance-related characteristics of musicians: a preliminary study. *Medical Science Monitor*, **12**(8), pp. CR325–CR331

KHALSA, S.B.S. and BUTZER, B., (2016) Yoga in school settings: A research review. *Annals of the New York Academy of Sciences*, **1373**(1), pp.45–55.

KNIGHTS, D. and MORGAN, G., (1993) Organization theory and consumption in a post-modern era. *Organization Studies*, **14**(2), pp.211–234.

LAYARD, R., (2006) *The Depression Report: A new deal for depression and anxiety disorders.* London: Centre for Economic Performance, LSE

MARMOT, M. and BELL, R., (2012) Fair society, healthy lives. *Public Health*, **126**, pp. S4–S10.

MARRYAT, L. and FRANK, J. (n.d.) The prevalence of adverse childhood experiences in the general population of Scottish children in the first 8 years of life. Society for Longitudinal and Life Course Studies Conference, 2017 University of Stirling. Available from:

<a href="http://www.scphrp.ac.uk/wp-content/uploads/2017/10/The-Prevalence-of-Adverse-Childhood-Experiences-in-the-General-Population-of-Scottish-Children-in-the-first-8-years-of-life-.pdf">http://www.scphrp.ac.uk/wp-content/uploads/2017/10/The-Prevalence-of-Adverse-Childhood-Experiences-in-the-General-Population-of-Scottish-Children-in-the-first-8-years-of-life-.pdf</a>
(Date accessed December 10th, 2017)

MCEWEN, B.S., (2008) Central effects of stress hormones in health and disease: Understanding the protective and damaging effects of stress and stress mediators. *European Journal of Pharmacology*, **583**(2-3), pp.174–185.

MINDFULNESS ALL-PARTY PARLIAMENTARY GROUP (MAPPG) *Mindful Nation UK*Available from <a href="http://themindfulnessinitiative.org.uk/images/reports/Mindfulness-APPG-Report Mindful-Nation-UK Oct2015.pdf">http://themindfulnessinitiative.org.uk/images/reports/Mindfulness-APPG-Report Mindful-Nation-UK Oct2015.pdf</a>. (Date accessed December 10<sup>th</sup>, 2017)

PARK, C.L., BRAUN, T. and SIEGEL, T. (2015) Who practices yoga? A systematic review of demographic, health-related, and psychosocial factors associated with yoga practice. *Journal of Behavioural Medicine*, **38**(34), pp.460–471.

ROSS, A. and THOMAS, S. (2010) The health benefits of yoga and exercise: a review of comparison studies. *The Journal of Alternative and Complementary Medicine*.16(1), pp.3–12.

SCHACKENBERG, N. (n.d.), *Mindfulness for Mental Health Resilience*. Available from <a href="https://specialyoga.org.uk/blog/mindfulness-mental-health-">https://specialyoga.org.uk/blog/mindfulness-mental-health-</a> (Date accessed December 10<sup>th</sup>, 2017)

SULDO, S.M., SHAUNESSY, E. and HARDESTY, R. (2008) Relationships among stress, coping, and mental health in high-achieving high school students. *Psychology in the Schools*, **45**(4), pp.273–290.

WHO (2013) World Health Organisation Mental Health Action Plan 2013 – 2020. Geneva: WHO. Available from

http://apps.who.int/iris/bitstream/10665/89966/1/9789241506021\_eng.pdf (Date accessed December 10<sup>th</sup>, 2017)

YOUNG MINDS (n.d.), *Mental Health Statistics*. Available from <a href="http://www.youngminds.org.uk/about/whats\_the\_problem">http://www.youngminds.org.uk/about/whats\_the\_problem</a> (Date accessed: October 17<sup>th</sup>, 2018)

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