



A REPORT BY THE ALL-PARTY PARLIAMENTARY GROUP
ON A FIT AND HEALTHY CHILDHOOD

MENTAL HEALTH THROUGH MOVEMENT

Please note that this is not an official publication of the House of Commons or the House of Lords. It has not been approved by the House or its Committees. All-Party Groups are informal groups of members of both Houses with a common interest in particular issues. The views expressed in this Report are those of the Group but not necessarily the views of each individual Group Officer or each contributor. This Report seeks to influence the views of Parliament and the performance of Government to better address issues relating to Mental Health Through Movement.

We thank Bournemouth and Winchester Universities for the financial support that made this Report possible and wish to make it clear that Bournemouth and Winchester Universities neither requested nor received approval of its contents.

This Report was prepared by a Working Group of the All-Party Parliamentary Group on a Fit and Healthy Childhood and we are grateful for the contributions of:

HELEN CLARK	Chair of the Working Group
PHIL ROYAL	APPG Secretariat
HELEN WEST	APPG Secretariat
DR. VICTORIA RANDALL	University of Winchester
PROFESSOR MICHAEL SILK	Bournemouth University
DR. ASHOK PATNAIK	Bournemouth University
SAMAR SHAHID	Bournemouth University
DR. MARTIN YELLING	Stormbreak
NEIL COLEMAN	Opal
CHRIS WRIGHT	Youth Sport Trust
STUART KAY	Youth Sport Trust
PIPPA BAGNALL	Resilience & Co
DR. ARIC SIGMAN	Consultant
SARAH ADAMS	University of Roehampton
DR. DEBORAH ALBON	University of Roehampton
DR. ALISON MURRAY	University of Roehampton
DR. PAMELA MURRAY	University of Worcester
ANNA HODGSON	Clear Sky Children's Charity
REBECCA HILL	Clear Sky Children's Charity
EMMA WHEWELL	University of Northampton
GARY PALMER	London Sport
DANIEL LEE	Mytime Active
AGNES JAVOR	Independent Counsellor
MARY LUBRANO	Association of Play Industries
KATHRYN SALT MBE	Independent Emotional Education Academic
PAULA LOCHRIE	Oxfordshire County Council
JEFF THOMAS	Play Therapy UK
MONIKA JEPHCOTT	Play Therapy UK
DR. AMANDA NORMAN	University of Winchester
DR. LALA MANNERS	Active Matters
JULIE PEARSON	St. Mary's University
JENNIFER MURRAY	St. Mary's University
DR. KRISTY HOWELLS	Canterbury Christ Church University

THE ALL-PARTY PARLIAMENTARY GROUP AND THE WORKING GROUP

The Working Group that produced this Report is a sub-group of the All-Party Parliamentary Group on a Fit and Healthy Childhood.

The purpose of this APPG is to promote evidence-based discussion and produce reports on all aspects of childhood health and wellbeing including obesity; to inform public policy decisions and public debate relating to childhood; and to enable communications between interested parties and relevant parliamentarians.

Group details are recorded on the Parliamentary website at:

<https://publications.parliament.uk/pa/cm/cmllparty/150929/fit-and-healthy-childhood.htm>

The Working Group is chaired by Helen Clark, a member of the APPG secretariat. The Working Group members are volunteers from the APPG membership with an interest in this subject area. Those that have contributed to the work of the Working Group are listed on the previous page.

The report is divided into themed subject chapters with recommendations that we hope will influence active Government policy.

The Officers of the APPG are:

CHAIR

Steve McCabe MP

CO CHAIR

Baroness (Floella) Benjamin OBE

VICE CHAIRS

Ian Austin MP, Nic Dakin MP, Diana Johnson MP, Lord McColl of Dulwich, Julie Elliott MP, Nigel Dodds MP, Dr. Philippa Whitford MP.

CONTENTS:

	<u>Page:</u>
EXECUTIVE SUMMARY	5
SUMMARY OF RECOMMENDATIONS	7
1. THE POLITICAL AND HISTORICAL CONTEXT FOR CHILD MENTAL HEALTH AND MOVEMENT IN ENGLAND	11
2. 'MENTAL HEALTH,' 'WELLBEING,' 'MOVEMENT': HISTORICAL DEFINITIONS AND INTERPRETATIONS INFORMING TODAY'S POLICIES	15
3. MIND AND BODY: THE LINK BETWEEN MOVEMENT AND THE MIND IN THE ACHIEVEMENT OF POSITIVE MENTAL HEALTH OUTCOMES	19
4. THE INFLUENCE OF DIGITAL CULTURE ON MOVEMENT AND CHILD MENTAL HEALTH	24
5. INTERVENTION-BASED APPROACHES TO ADVANCE POSITIVE MENTAL HEALTH THROUGH MOVEMENT	29
6. THE IMPACT OF MOVEMENT IN ADDRESSING THE EFFECTS OF SOCIAL AND ECONOMIC INEQUALITIES, CULTURAL AND ETHNIC DIVERSITY AND DISABILITY ON MENTAL HEALTH AND WELLBEING	36
7. INTERNATIONAL MODELS OF PRACTICE FOR THE USE OF MOVEMENT TO SUPPORT MENTAL HEALTH AND WELLBEING	42
8. DEVOLVED UK COUNTRY MODELS OF PRACTICE FOR THE USE OF MOVEMENT TO SUPPORT MENTAL HEALTH AND WELLBEING	45
9. TRAINING NEEDS OF THE WORKFORCE	50
10. MOVEMENT AND POSITIVE MENTAL HEALTH: THE WAY FORWARD	55

MENTAL HEALTH THROUGH MOVEMENT

A REPORT BY THE ALL-PARTY PARLIAMENTARY GROUP ON A FIT AND HEALTHY CHILDHOOD

EXECUTIVE SUMMARY

Children's mental health:

'has become an issue of real concern, in the media and to both politicians and NHS leaders, over the last five years in particular. It has prompted numerous inquiries, reports, recommendations and pledges by politicians and NHS leaders to improve the situation':

<https://www.theguardian.com/society/2018/nov/22/what-is-happening-with-childrens-mental-health>

On July 1st 2019, the Local Government Association released statistics to show that:

'There were 205,720 cases where a child was identified as having a mental health issue in 2017/18, compared with 133,600 in 2014/15- up 54%':

<https://www.local.gov.uk/about/news/councils-seeing-more-560-child-mental-health-cases-every-day>

It is within this context that the All-Party Parliamentary Group on A Fit and Healthy Childhood presents its 14th Report: *'Positive Mental Health Through Movement'*.

With 1 in 10 children now having a mental health diagnosis and 1 in 4 an undiagnosed mental health issue, this, our third Report on the issue of child mental health, addresses the link between positive mental health and physical activity and movement experiences at a time when, paradoxically, today's children and young people are more inactive and play less than ever before.

The growing recognition of a link between mental health and movement is fortuitous because from September 2019, health education in English schools will be statutory alongside the expectation that they will offer their pupils at least 30 'active minutes' per day. The APPG on A Fit and Healthy Childhood welcomes the change whilst recognising that those responsible for implementing the new strategy (including practitioners and families) will need guidance as they help children to develop individual strategies to address future adverse events and foster the positive sense of self that will enable them to lead fulfilled, healthy lives.

This Report is therefore presented as a practical contribution to an essential debate.

It offers new strategies against the persistence of historical and traditional ways of thinking; examines and collates best practice in the devolved Home Countries as well as the wider world and discusses exactly what is required to ensure that future child mental health strategy is holistic. It is respectful of equalities and is aware that the successful outcome of policies is entirely dependent upon the expertise and confidence of those tasked with the responsibility of delivering them.

As the 21st century advances, we consider the effects of the digital age and its impact on children and young people's mental health and wellbeing and the crucial role of parents and carers who want the best for their children in a societal climate where, all too often, fears of 'nanny state' meddling serve to isolate families who suffer in silence – until a disaster that may have been all too predictable and preventable overtakes them, making a private grief a public concern.

The trajectory of progress in mental health policy has been 'stop start' rather than linear, with legislative change in 1959 and 1983, an increase in spending from 1997-2010 and radical changes to child and adolescent mental health services (CAMHS) in 2000. The Wessely Independent Review of the Mental Health Act is another such milestone:

<https://www.gov.uk/government/groups/independent-review-of-the-mental-health-act>

The APPG on A Fit and Healthy Childhood anticipates that the Government will fulfil its pledge to parents, children and practitioners by introducing much needed mental health legislation - and that our trio of Reports and the holistic theme of this one will help to inform a strategy that works for 21st century children.

SUMMARY OF RECOMMENDATIONS

1. THE POLITICAL AND HISTORICAL CONTEXT FOR CHILD MENTAL HEALTH AND MOVEMENT IN ENGLAND:

- 1.1 A 'joined-up' review of children's health needs that addresses the collective of both the physical and mental health of a child
- 1.2 Services that are better integrated
- 1.3 Government policy and strategy to position increasing movement and physical activity as a *preventative* approach to mental health support for young people
- 1.4 Educational settings to examine ways in which to include movement as part of their mental health curriculum delivery.

2. 'MENTAL HEALTH', 'WELLBEING', 'MOVEMENT': HISTORICAL DEFINITIONS AND INTERPRETATIONS INFORMING TODAY'S POLICIES:

- 2.1 Clarification for parents/professionals of what is meant by 'wellbeing' 'mental health' and their relevance to young children
- 2.2 Recognition of the value of prenatal movement on wellbeing and mental health and for this to be used as the starting point for policy formulation
- 2.3 More training for school frontline workers in interacting with children and families in valuing, achieving and maintaining good mental health
- 2.4 A holistic education; emphasising the importance of the outdoors and movement in highlighting the interrelationship between development, wellbeing and mental health in children.
- 2.5 A reassessment of relevant language and terminology: replacing (where appropriate) the customary deployment of '*physical activity*' with '*movement*' which is with a child pre-birth.

3. MIND AND BODY: THE LINK BETWEEN MOVEMENT AND THE MIND IN THE ACHIEVEMENT OF POSITIVE MENTAL HEALTH OUTCOMES:

- 3.1 All schools and Early Years settings to provide developmentally appropriate physical activity so that children experience and associate movement with a positive sense of identity and wellbeing
- 3.2 All education professionals to receive training on ways in which to maximise movement strategically, thus enhancing the wellbeing of children of all dispositions, abilities and needs
- 3.3 All education and health professionals to receive training in the variety and simplicity of movement experiences from birth that are instrumental in the development of mental wellbeing.

4. THE INFLUENCE OF DIGITAL CULTURE ON MOVEMENT AND CHILD MENTAL HEALTH:

- 4.1 'Movement' to be re-positioned as part of a holistic approach to healthy living in which simple lifestyle choices can improve an individual's physical, social and mental health
- 4.2 Government to invest in a national network of after-school clubs that support young people in safeguarding their mental health, developing improved decision-making processes and interacting with role models
- 4.3 Expansion of public playground provision; reversing the current closure trend
- 4.4 Initial and continuous teacher training to contain less screen-based teaching content
- 4.5 Government to publish age-related screen times in line with WHO recommendations.

5. INTERVENTION-BASED APPROACHES TO ADVANCE POSITIVE MENTAL HEALTH THROUGH MOVEMENT:

- 5.1 Government mental health strategy should be re-positioned to embrace a holistic mind/body approach and produce a cross-Departmental Policy Consultation Paper to this effect
- 5.2 A choice of best practice initiatives to be rolled out in a national pilot, following the collation of appropriate interventions.

6. THE IMPACT OF MOVEMENT IN ADDRESSING THE EFFECTS OF SOCIAL AND ECONOMIC INEQUALITIES, CULTURAL AND ETHNIC DIVERSITY AND DISABILITY ON MENTAL HEALTH AND WELLBEING:

- 6.1 All Government policy relating to children and young people to reflect an integrated approach to mental and physical health
- 6.2 A permanent UK-wide Taskforce for Children and Young People's Mental Health to be established that brings together sector-wide experts to improve and update strategies for mental health services
- 6.3 All Government policy for the health of children and young people to undergo an Impact Assessment to ensure that it is 'fit for purpose' in serving the needs of groups perceived to be experiencing disadvantage or exclusion.

7. INTERNATIONAL MODELS OF PRACTICE FOR THE USE OF MOVEMENT TO SUPPORT MENTAL HEALTH AND WELLBEING:

- 7.1 Government to place movement interventions at the heart of its strategy to support the mental health of children and young people
- 7.2 This should appertain in particular to interventions designed to support pupil mental health within school; forming a central component of training for the School Mental Health Lead and for all staff undertaking Initial Teacher Training (ITT) and ongoing professional development programmes (CPD)

8. DEVOLVED UK COUNTRY MODELS OF PRACTICE FOR THE USE OF MOVEMENT TO SUPPORT MENTAL HEALTH AND WELLBEING:

- 8.1 Stronger parity and integration across the devolved UK for physical and mental health funding, policy and workforce**
- 8.2 The four Governments to establish and promote National Play Strategies that must be reflected in all policy areas involving children**
- 8.3 The four Governments to support children through the inclusion of physical activity, health and wellbeing within their National Curriculum.**

9. TRAINING NEEDS OF THE WORKFORCE:

- 9.1 Greater importance to be placed for primary and secondary trainees on an understanding of child developmental theory, attachment theory and how this can impact learners, making them better equipped to improve long term outcomes for children**
- 9.2 The proposed changes to the PHSE curriculum and its statutory status mean that teachers and support staff will require appropriate support and training to be able to deliver the new content effectively**
- 9.3 Teachers will need support from senior leaders to feel confident in the school's learning philosophy; affording sufficient time to embed movement activities must be supported instead of dismissed as detrimental to 'results-based' education**
- 9.4 Play training to be a core component of all professional training for early years and primary school teachers and support staff**
- 9.5 Development of an online mentoring approach to accompany the workforce and support them through potential working challenges**
- 9.6 Teacher pre and in service programmes to include comprehensive training in wellbeing and creative affectively-based pedagogies**
- 9.7 Additional resources for primary and secondary schools to access professional development opportunities in how to enhance wellbeing through movement / how to assess movement in order to enhance wellbeing**
- 9.8 Teachers should have awareness of the therapeutic nature of movement in supporting mental health. Training needs include being equipped with a range of activities and strategies to offer to children and young people.**

10. MOVEMENT AND POSITIVE MENTAL HEALTH: THE WAY FORWARD:

- 10.1 Government to provide training for teachers in what is meant by 'good' mental health in addition to the proposed initiatives to help them to recognise early signs of poor mental health in their pupils**
- 10.2 Government to make statutory provision that every primary school must provide a minimum of 75 minutes of actual play activity (separate from eating/queuing times) of a specified high quality every day**
- 10.3 School holidays should enable children to access enjoyable and freely**

- chosen play experiences, supported as appropriate by trained, funded staff in the green space of economically deprived communities that need it
- 10.4 Funding of public playgrounds to be prioritised by policy-makers and closure programmes halted, because playgrounds fulfil a unique role in improving children's movement, social interaction, fitness and physical and mental health
 - 10.5 Doctors, nurses and teachers in early education settings and primary schools to provide pre-emptive guidance to parents/carers about limiting media use in the home, raising the age for screen use, reducing the degree of exposure and discouraging screens in children's bedrooms
 - 10.6 Policy-makers to adopt a holistic mind/body approach to children's health and for this to be instilled at all levels of training for doctors, nurses and other health professionals.

1. THE POLITICAL AND HISTORICAL CONTEXT FOR CHILD MENTAL HEALTH AND MOVEMENT IN ENGLAND

Between 1995 and 2014, the proportion of children and young people aged 4-24 in England reporting a long-standing mental health condition increased six fold and by 2014, almost one in twenty reported a mental health condition. In 2014, young boys aged 4-12 were consistently more likely to report a long-standing mental health condition than young girls and this applied to England, Scotland and Wales.

A connection between positive mental health and physical activity has been comprehensively established both by academics (*Penedo FJ & Dahn JR, 2005 'Exercise and well-being: a review of mental and physical health benefits associated with physical activity', Current Opinion in Psychiatry: Vol, 18(2), p 189-193*) and bodies such as The Royal College of Psychiatrists and MIND in their advice to the public.

The World Health Organisation:

<https://www.who.int/news-room/detail/24-04-2019-to-grow-up-healthy-children-need-to-sit-less-and-play-more>

recommends that children devote less time to screen-gazing, being restrained in prams/seats, get better quality sleep and become more active and a 2019 Breaktime report confirms a close affinity between active play and good mental health:

<https://www.ucl.ac.uk/ioe/news/2019/may/break-time-cuts-could-be-harming-childrens-development>

Many reports and research projects testify to the coexistence and symbiotic effects of physical and mental wellbeing.

Companies and media sources offer advice and possible courses of action in an attempt to encourage children (and adults) to move. Yoga, mindfulness and calm moments are currently gaining in popularity within school curricula or after school clubs:

<https://www.telegraph.co.uk/health-fitness/mind/should-children-learning-yoga-classroom/>

<https://www.headspace.com/meditation/kids>

<https://www.helpguide.org/articles/healthy-living/the-mental-health-benefits-of-exercise.htm>

Within educational settings, connections between movement, academic advancement and wellbeing are at the forefront of research and academic manifestoes, where physicality is balanced by the importance of cognitive, emotional and social aspects of traditional physical education:

<https://www.kidsdiscover.com/teacherresources/the-benefits-of-physical-activity-on-student-learning/>

However, notwithstanding the above examples and others, the role of physical activity to support young people's mental health in the UK is yet to be recognised, or strategically embedded in Government reform. At best, separate policies have run concurrently and there is no indication that this will change as a consequence of Conservative Prime Minister Theresa May's legacy pledge:

'To overhaul the Mental Health Act to make it fit for modern society' (17th June 2019).

Some major policy milestones (including where links between child physical health and mental health have been made) are summarised below.

The 2011 blueprint, *'No Health Without Mental Health'*:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/213761/dh_124058.pdf

established a plan to improve mental health for all ages, alleging that:

'By promoting good mental health and intervening early, particularly in the crucial childhood and teenage years, we can help to prevent mental illness from developing and mitigate its effects when it does.'

The strategy's third objective was to aspire for more people with mental health problems to derive benefit from good physical health. An expansion of provision for children and young people was proposed as part of a £400 million investment.

A further approach, *'Closing the Gap: priorities for essential change in mental health'*:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/281250/Closing_the_gap_V2_-_17_Feb_2014.pdf

also recognised that people with mental health problems experience higher levels of physical health difficulty (eg obesity) than the wider population and engage in less physical activity.

Yet any association between poor physical and mental health is only realised in terms of health outcomes. At this juncture, physical activity receives no sign-posting as a potential strategy for improving the mental health of young people.

The 2015 Department of Health and NHS England document *'Future in Mind'*:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/414024/Childrens_Mental_Health.pdf

established a '*Children and Young People's Mental Health and Wellbeing Taskforce*' but physical activity and physical health were not aligned to positive mental health, despite the call for '*a whole system approach*' to define young people's mental health provision.

However, a report from the independent Mental Health Taskforce to NHS England '*The Five Year Forward View for Mental Health*':

<http://www.england.nhs.uk/wp-content/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf>

made proposals which involved improving mental health outcomes by 2020/21 and introduced recommendations for the NHS arm's length bodies to achieve parity of esteem between mental and physical health for children and young people.

The report noted:

- A close link between physical and mental health; people with severe and prolonged mental illness are at risk of dying 15-20 years earlier
- Two thirds of the deaths are from avoidable physical illnesses such as heart disease or cancer; many triggered by smoking
- A lack of access to physical healthcare for people with mental health problems
- A third of people with schizophrenia in hospital received the recommended assessment of cardiovascular risk in the previous 12 months
- People with long term physical illnesses experience extra complications if they also develop mental health problems; this is largely unaddressed.

The Early Years Foundation Stage Statutory Framework (EYFS) 2017 encompasses physical and personal, social and emotional aspects of learning. The personal, social and emotional component of the EYFS continues to endorse children's resilience and support their physical and mental health.

The most recent 2017 Green Paper, '*Transforming Children and Young People's Mental Health Provision*':

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/664855/Transforming_children_and_young_people_s_mental_health_provision.pdf

further highlighted the importance and role of physical activity in good mental health and wellbeing.

The cross-governmental sport strategy '*Sporting Future*' was linked to the Green Paper and demonstrated the crucial role of physical activity in this programme for young people's mental wellbeing ('*Sporting Future: A New Strategy for an Active*

Nation' 2015). Sport England has since committed over £9 million of Government and National Lottery funding to sport and physical activity projects which specifically focus on improving people's mental health outcomes.

Responding to the Green Paper, Secretary of State for Education, Damien Hinds MP acknowledged the Government's commitment to address both physical and mental health issues via the introduction of compulsory content on health education in schools from September 2019 and a focus on child physical health by means of the childhood obesity strategy:

<https://hansard.parliament.uk/Commons/2018-07-19/debates/18071938000020/RelationshipsAndSexEducation>

The new guidance requires primary schools to teach pupils:

- That mental wellbeing is a normal component of daily life
- That there is a normal range of emotions
- How to recognise and talk about their emotions
- How to judge whether what they feel and how they behave is appropriate and proportionate
- The benefits of physical exercise, time outdoors, community participation, voluntary and service-based activity on mental wellbeing and happiness
- Simple self-care techniques
- That isolation and loneliness can affect children and it is extremely important for them to discuss their feelings with an adult and seek support
- Bullying (including cyber bullying) has a negative, often lasting, impact on mental wellbeing
- Where and how to seek support (including recognising the prompts for this)
- It is common for people to experience mental ill health.

Although recent policy documents reveal an increased awareness of a connection between physical and mental health, it has predominantly been represented in one of two ways:

1. Recognising the importance of mental health as an illness and the need for it to receive parity of esteem with physical health
2. An understanding that in order for people to improve their mental health, good physical health is a priority.

Policy and government strategy has yet to realise the ambition of integrating physical activity (or movement more generally) as a means to improve a young person's mental health. The adoption of such a strategy would necessitate a significant shift in the culture and infrastructure that give access to support and

would seem to represent a 'modern' approach. Yet in ancient Greece, Hippocrates (the first person to consider mental illness from a scientific stance) proposed that 'depression' be treated by pleasant surrounds, exercise and good diet.

A holistic 'mind and body' treatment of mental illness as advocated by this report is perhaps a timely reflection of traditional values within a modern setting.

Recommendations:

- 1.1 A 'joined-up' review of children's health needs that addresses the collective of both the physical and mental health of a child
- 1.2 Services that are better integrated
- 1.3 Government policy and strategy to position increasing movement and physical activity as a *preventative* approach to mental health support for young people
- 1.4 Educational settings to examine ways in which to include movement as part of their mental health curriculum delivery.

2. 'MENTAL HEALTH', 'WELLBEING', 'MOVEMENT': HISTORICAL DEFINITIONS AND INTERPRETATIONS INFORMING TODAY'S POLICIES

In 1978, The World Health Organisation (WHO) defined 'health' as:

'A state of complete mental and social wellbeing and not merely the absence of disease or infirmity.'

'Wellbeing' is a term that might seem to evade precise definition. To some it is a notion of happiness or contentment, but others (Seligman, 2011) favour a more complex construct of 'positivity' including happiness:

<https://www.internationaljournalofwellbeing.org/index.php/ijow/article/viewFile/89/238?origin=publications>

Csikszentmihalyi (2002) defines 'happiness' as a component of wellbeing with the individual taking responsibility for their personal wellbeing by maintaining a sense of inner balance. Anxiety, depression and anger are seen as natural conditions of life and comprise part of a complete understanding of wellbeing:

<https://www.pursuit-of-happiness.org/history-of-happiness/mihaly-csikszentmihalyi/>

Interpretations of wellbeing are therefore dynamic; fluctuating when people interact variously at different times with the world in which they live.

'Wellbeing', 'life satisfaction' and 'quality of life' are used interchangeably; reflecting objective and subjective aspects of a person's life. In policy terms, 'wellbeing' is predominantly defined objectively; using wellbeing indicators and population data to make national and international comparisons that can be measured.

In addition, the importance of self-reporting and adult/child subjective experience in communicating emotions is now widely acknowledged, enabling resources and interventions to be tailored to suit local and individual needs. Within that context, concepts of wellbeing now encompass an understanding of, and respect for, children's rights and voices.

By focusing on present-day needs, it is possible to provide opportunities to shape a child's quality of life so that they are more likely to achieve their objectives. The approach could involve the use of national data both to improve current mental health services and interventions and prepare for the future:

<http://www.internationaljournalofwellbeing.org/index.php/ijow/article/viewFile/89/238>

A 2017 study by the Sports Industry research centre at Sheffield Hallam University confirmed that life satisfaction and happiness were higher and levels of anxiety lower for physically active people:

http://shura.shu.ac.uk/20982/1Yeh_2018_phd_PhysicalPsychologicalEmotional.pdf

The strongest relationship was seen to be with the quality as opposed to quantity of activities.

Yet 'movement' means more than what is understood by 'physical activity'. It starts before birth when a mother swings and rocks her own body during pregnancy.

Once a child is born, the vestibular system is developed through the baby's own continual rocking, kicking and balancing, creating a sense of self and body-awareness. Parents/carers monitoring the child's growth should therefore consider feelings and the confusion of movement and fear alongside physical development as the child acquires skills and competency (*Norman A, 2019, 'Conception to Two Years. Development, Policy and Practice', Routledge, London*). Physical and mental health are therefore naturally interdependent entities and require a holistic approach.

The Early Years Foundation Stage (EYFS, 2017) emphasises the importance of children being supported in using their senses to learn and make connections about the world around them:

https://www.foundationyears.org.uk/files/2017/03/EYFS_STATUTORY_FRAMEWORK_2017.pdf

Movement experience for young children should include a range of gross motor (whole body), locomotor (travelling) and manipulative (fine motor) opportunities that stimulate the vestibular and proprioceptive senses. These systems are closely linked to balance and spatial awareness – both of which impact on emotional wellbeing. The vestibular system may be supported by the following movements: swinging/spinning, sliding/climbing, rocking/rolling, hanging upside down. The proprioceptive system may be supported by engaging in ‘heavy’ movements that include digging, pushing/pulling, lifting/carrying, sweeping. Daily experience of these movement patterns ensures that fundamental movement skills are firmly in place – and that the fine manipulative competencies necessary for handwriting – and making daisy chains – are acquired with ease.

Current policy drivers promote physical activity as part of the answer to the entrenched obesity dilemma, but less attention has been paid to the link between free play (using large body movements freely during child-led and initiated play) and its potential to improve key aspects of emotional wellbeing such as minimizing anxiety and depression:

<https://www.rwjf.org/en/library/research/2003/01/healthy-schools-for-healthy-kids.html>

School playtime, however, is largely a missed opportunity for UK children. Their daily breaks often consist of just 30 minutes in total; supervising staff receive little or no training in how to promote a playful atmosphere and all too often, school leadership teams throw money at the problem; invariably a ‘one off’ spend on fixed playground equipment that generates at best, only short-term interest.

The 2019 ‘*Playtime Matters*’ report reveals an inconsistent picture worldwide, with playtimes spanning from 15 minutes to over two hours during school days that vary themselves from 3.5 hours to 10 hours in duration:

<https://outdoorclassroomday.org.uk/resource/playtime-matters-report/>

However, creative playtimes, promoting restful and engaging free play activities, can have widespread benefits to children’s mental health both in school, the home and external community settings.

Taken from an interview with Michael Follett, Founder and Director of Outdoor Play and Learning (OPAL) CIC published in Stress Health magazine on 4th July 2019

<https://www.stresshealth.org/play-and-kids-with-aces-thats-where-everything-is-worked-out/>

'Play is not all lovely and fun. It is a messy laboratory where experiments can be made in safety. Not all trauma can be worked through in play, but certain kinds of play, including Deep Play, Recapitulative Play and Mastery Play as described in Bob Hughes' Taxonomy of Play Types, can allow children time to playfully explore life, death, injury, anger, loss and powerlessness. When children are deprived of plentiful self-directed opportunities to experience all 16 of the Play Types, they lose key potential pathways to fully grow, learn, enjoy, develop resilience and empathy, and heal.'

The World Health Organisation defines mental health as:

'Not simply the absence of disorder but a state of wellbeing in which every individual realises his or her potential, can cope with the stresses of life, work productively and fruitfully and is also able to make a contribution to his or her community':

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/252660/33571_2901304_CMO_Chapter_10.pdf

For children and young people, mental health is the foundation of healthy development and problems arising from it can last a lifetime.

However, despite a consensus that the early years matter, mental health does not feature in many national early years' research surveys; whilst longitudinal study material shows that behavioural and emotional problems exhibited by very young children are extremely likely to persist, and develop during the school years and beyond.

Childhood wellbeing is indeed multi-faceted.

Policies to facilitate it should therefore include dimensions of physical, emotional and social wellbeing and maintain a focus on the immediate lives and circumstances of children whilst projecting their future life trajectories:

<https://www.cdc.gov/childrensmentalhealth/basics.html>

Recommendations:

- 2.1 Clarification for parents/professionals of what is meant by 'wellbeing' 'mental health' and their relevance to young children
- 2.2 Recognition of the value of prenatal movement on wellbeing and mental health and for this to be used as the starting point for policy formulation
- 2.3 More training for school frontline workers in interacting with children and families in valuing, achieving and maintaining good mental health
- 2.4 A holistic education; emphasising the importance of the outdoors and movement in highlighting the interrelationship between development,

wellbeing and mental health in children:

<https://outdoorclassroomday.com/2018/03/19/five-reasons-going-outdoors-improves-childrens-mental-health-and-wellbeing/>

- 2.5 A reassessment of relevant language and terminology: replacing (where appropriate) the customary deployment of '*physical activity*' with '*movement*' which is with a child pre-birth

3. MIND AND BODY: THE LINK BETWEEN MOVEMENT AND THE MIND IN THE ACHIEVEMENT OF POSITIVE MENTAL HEALTH OUTCOMES

The World Health Organisation maintains that the wellbeing of children is a basic human right; realised by:

'Having a positive sense of identity, the ability to manage thoughts, emotions, as well as to build social relationships, and the aptitude to learn and to acquire an education, ultimately enabling their full active participation in society', (WHO's comprehensive mental health action plan 2013-2020).

In the context of improving children's mental health, it is important to recognise that mental health has a physical effect on the body and vice versa and that there is an increasing demand for emotionally stage-appropriate mental health and movement interventions in childhood.

In 2019, the year of writing, the United Nations Committee on the Rights of the Child celebrates the 20th November 1989 adoption of the groundbreaking Convention on the Rights of the Child.

Children's right to play is enshrined in the 1989 Convention, and a UNESCO Education For All 2015 framework that:

'Envisions a world in which every woman, child and adolescent in every setting realises their rights to physical and mental health and wellbeing.'
(Unicef 1990, United Nations Convention on the Rights of the Child (UNCRC)
(UNESCO, 2000, Education For All).

Froebel, Montessori and Steiner were the first childhood pedagogues to illustrate the interconnectedness of physical, mental and emotional health. 'In utero' a child expresses various food, noise and temperature likes and dislikes by kicking and wriggling and mother/infant interrelationship is transmitted via sound and movement. After the emotional and physical experience of birth, they develop secure attachment by means of shared physical experiences.

Infant self awareness develops primarily through acquiring, rehearsing and refining physical skills and essential 'body maps' are constructed as coordination, strength, balance and agility increase through daily opportunities for movement.

Independent mobility unleashes a wealth of personal decision-making and emotional states are mirrored by physical action; enabling adults to engage with their child's feelings by reading the child's 'body language'. Resilience and self-regulation are acquired via exposure to a broad range of physical/movement play and daily introduction to a variety of environments and situations; thereby allowing children to manage and experience a range of emotions.

The developing child's physical activity and movement become increasingly important in ensuring that communication skills are rehearsed and refined. Through physical play, children form and sustain friendships, learn to co-operate, lead and follow, decide with what, who and where to play; determine what resources are needed - start to develop empathy - better understand children with additional needs and plan, organise, argue and resolve emergent disputes.

In 1999, the Mental Health Foundation cited the following areas as making a positive contribution to young children's mental health and they are here linked to children's physical activity and movement play: (*Mental Health Foundation, 1999, 'Bright Futures. Promoting Children and Young People's Mental Health', London. Mental Health Foundation'*)

Learning to enjoy solitude: to be able to live quietly and enjoy peace

An ability to enjoy solitude and recognise when it is time to recover and recuperate is important; particularly for physical development when opportunities for solitary activities may be unavailable and deciding to 'take time out' may be disruptive.

Initiating, developing and sustaining mutually satisfying personal relationships

Engaging in physical activity offers the necessary range of interactive experience for children to ensure easy communication with adults, peers and siblings. Relationships are initiated, formed and sustained through play as activities are re-visited and refined over time.

Playing and learning

All play is a learning opportunity; physically active play affords unique opportunities to engage with wider friendship groups and initiate and develop challenging projects.

Resolving problems and learning from setbacks

'Being physical' is a means by which to enhance children's interpersonal problem-solving abilities and encourage them to manage setbacks positively.

The need to feel competent

Acquiring physical skills releases untapped potential as children investigate and explore their environments. Language/communication skills practised during physical play are a gateway to increasingly complex activities. Unique personal achievements range from small skills like holding a spoon to larger ones like running fast and climbing stairs.

The need to feel autonomous

Early childhood autonomy is experienced primarily through gaining an increasing repertoire of physical skills. Practising movement skills develops autonomy; personal decisions are taken about where, how, with whom and what to play. Self-care such as hand-washing and teeth-brushing are simple milestones in an emergent autonomy.

The need to feel significant

The value placed by adults upon young children's physical skills impacts their view of themselves. Labelling a child 'reckless' or 'clumsy' will have adverse consequences to their self-esteem and children's sense of achievement in the early years is frequently linked with their use of physical skills within the peer group.

The need to belong

'Belonging' as a concept stems from the early years and covers a range of domains. In physical terms it implies an affinity with self and the body that translates into easy physical engagement with other individuals and the environment. Young children experience a physical sense of belonging by recognising and acting upon shared attributes and abilities.

School-based programmes have the potential to educate children in the skills necessary to make the cognitive and physical progress that will improve their health and wellbeing. They can create inclusive, diverse environments that value children's wellbeing with the responsibility for children's health being proportionately shared between teachers, carers and the wider community.

Children demonstrating greater proficiency in movement skills enjoy more social opportunities than their less competent peers (*Watkinson EJ, Dunn JC, Cavaliere N, Calzonetti K, Wilhelm L, and Dwyer S, 2001, 'Engagement in playground activities as a criterion for diagnosing developmental coordination disorder', Adapt Physical Activity Quarterly, 18; 18-34. doi:10.1123/apaq*) and delayed movement can be linked to cognitive deficit.

An interdisciplinary 'whole-school' approach allows children to develop psychosocial resources of resilience whilst the use of adaptive coping techniques (as appropriate) can boost their psychological and physical health.

The Department of Education has recognised that:

'In order to help their pupils succeed; schools have a role to play in supporting them to be resilient and mentally healthy', (Mental health and behaviour in schools', 2018).

Children need adults to help them achieve the positive psychological wellbeing that will sustain and assist their transition to adulthood. A whole school ethos:

- Appreciates the complex philosophical relationship between mind and body concepts (understood from a variety of perspectives in a variety of contexts)
- Understands that these conceptualisations affect the ways in which they are evaluated and measured
- Approaches interventions which target concepts of body and mind (such as mental health and movement) through an interdisciplinary lens so that the method of design and evaluation is holistic
- Employs an interdisciplinary approach to encourage understanding of psychological concepts through the *entire* body
- Implements appropriate mind-body practices – targeting children's psychological and physical health in an integrated approach.

Following calls to address the incidence of depression and distress in young people, mind-body interventions are in demand.

Schools aim to foster resilience in children through movement practices in which physical activities (such as running) become part of the daily curriculum and educate about mental health concepts in a way that will be understood across the age groups and used as a tool in everyday life.

Similarly, a growing evidence base links active time spent outdoors in 'green spaces' to good mental health

The physical challenges that are frequently found within green spaces can help children learn to manage risk and develop resilience. Mytime Active's 'MEND in Schools' programme is a popular initiative that combines physical activity sessions and interactive workshops about healthy eating and mental wellbeing with the promotion of green space activity.

A holistic mind-body approach has been shown to be successful in helping children recover from trauma.

Early childhood trauma often occurs within the context of a relationship with a person or people supposed to love, guide and keep children safe; at the very time when the child's sense of identity, self-esteem and safety is being shaped.

Extreme changes take place in the brain and body following childhood trauma (*'The Body Keeps the Score; Brain, Mind and Body in the Healing of Trauma'*, Bessel van der Kolk, 2014) and the body's threat perception system becomes enhanced and overactive.

Such children are likely to feel unsafe in their own bodies and qualified Play and Creative Arts Therapists can assess the child's particular needs and work at a pace suitable to the individual. Art materials, sand, clay, dance movements, role play and drama may be used to help children to tell their stories in ways that are safe and contained without re-traumatising them. Play is a child's natural language and they will unconsciously bring to it, events that have happened to them in life; thereby exploring earlier issues in a way that feels safe and comfortable in the context of a relationship with a qualified and trained therapist who understands that language too.

Despite a historic failure to appreciate the intrinsic connection between mind and body, contemporary understanding of health and wellbeing is at last starting to acknowledge its importance; nudged by the escalating national mental health crisis menacing children and young people today.

In this way, mind and body are increasingly viewed as being interconnected; necessitating the adoption of holistic strategies to sustain optimum levels of mental and physical health.

Recommendations:

- 3.1 All schools and Early Years settings to provide developmentally appropriate physical activity so that children experience and associate movement with a positive sense of identity and wellbeing
- 3.2 All education professionals to receive training on ways in which to maximise movement strategically, thus enhancing the wellbeing of children of all dispositions, abilities and need
- 3.3 All education and health professionals to receive training in the variety and simplicity of movement experiences from birth that are instrumental in the development of mental wellbeing

4. THE INFLUENCE OF DIGITAL CULTURE ON MOVEMENT AND CHILD MENTAL HEALTH

The World Health Organisation (WHO) considers physical activity to be of benefit to child mental health on the grounds that it reduces:

'Symptoms of anxiety and depression', (WHO guidelines on physical activity, sedentary behaviour and sleep for children under 5 years of age. Geneva; World Health Organisation; 2019. Licence: CC BY-NC-SA 3.0 IGO0).

Public Health England (PHE) concurs, suggesting that increased screen time and certain internet activity can impact adversely upon young people's mental and emotional wellbeing and may trigger:

- Increased feelings of loneliness
- Reduced feelings of social acceptance
- Conduct problems and aggression:
<https://www.mirror.co.uk/lifestyle/health/spending-much-time-online-causing-3549003>

In 2016, the Association of Play Industries (API) recorded a marked decline in children's playground provision:

<https://www.api-play.org/news-events/nowhere-play-campaign/>
<https://www.api-play.org/news-events/nowhere-to-play/>

stating that:

- By 2020/21 there will have been a decrease in spend on play facilities of 44% since 2017/18
- In 2016/17 local authorities closed 63 playgrounds and in 2017/18 a further 70 playgrounds were closed
- Local authorities have closed a total of 347 playgrounds across England since 2014
- There will be a projected reduction in spend on playgrounds of over £13m each year on average across England
- Local authorities estimate a decrease in their spending on playgrounds of £25m by 2021.

A shift from outdoor play to indoor screen time also appears in data from a recent survey of over 1,100 parents of 2-12 year olds via Mumsnet and conducted by the API (*Association of Play Industries April 2019. Mumsnet Survey Report. Unpublished*).

Around half of all respondents recorded difficulty in persuading their child to leave screens; the number rising amongst those with an older child (60% for children aged 11-12).

43% worried about the amount of time their child habitually spent on screen, rising to 57% for children aged 10-12. The data shows a decline in outdoor play from age 8 onwards, with 70% of 10-12 year olds preferring screen use.

A 2013 Public Health England report *'How healthy behaviour supports children's wellbeing'*:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/232978/Smart_Restart_280813_web.pdf

claims that British children spend disproportionately large amounts of time on screen compared to those in other Western European countries and identifies a 'dose effect' in screen time impact on children's emotional state:

'Each additional hour of viewing increases children's likelihood of experiencing socio-emotional problems and low self-esteem.'

The report found that excessive screen time was linked to feelings of anxiety and depression and was responsible for curtailing the opportunity for social interaction and physical activity.

However, in 2018, London hosted the world's biggest educational technology convention, Bett:

<https://www.theguardian.com/commentisfree/2018/jan/26/children-tech-addicts-schools>

and screen-based educational activity is increasingly influential in the classroom despite findings such as that of a large scale OECD study:

<https://www.bbc.co.uk/news/business-34174796>

assessing the impact of school technology on international test results (such as the PISA tests taken in more than 70 countries) and tests measuring digital skills.

The study data shows that education systems that have invested heavily in ICT have seen no commensurate improvement in PISA test results for reading, mathematics or science.

Research into children's discretionary (non-homework) screen time (DST) and physical activity (PA) records a link between higher DST and lower PA.

A study of 10-15 year olds concluded:

'English youth have high levels of sedentary time, low levels of PA....using social media was associated with higher sedentary time in both sexes...Boys who owned game consoles were five times more likely to have high amounts of sedentary time. Boys who owned digital/satellite TV receivers were almost twice as likely to have a low fitness.'

(Sandercock GR, et al 2016, 'Screentime and physical activity in youth: thief of time or a lifestyle choice?', Journal of Physical Activity and Health', 9(7), 977-984).

The New Zealand Government's longitudinal study, *'Effects of screen time on preschool health and development'*, involving over 5200 young children, concluded that:

'The long-term risks associated with higher levels of early screen exposure may chart developmental pathways toward unhealthy dispositions in adolescence and adulthood', (Ministry of Social Development, 2019).

Discretionary Screen Time (DST) has become the single main activity of First World children.

British children aged 5-15 years spend approximately 5 hours per day on screen; the amount is proportionately higher for teenagers and lower for younger children. At standard UK levels, the average adolescent using screen devices (Internet, gaming, TV, mobile) spends 76 twenty four hour days per year on DST. By age 18, this has risen to three years:

(Sigman A, 2019 'A Movement for Movement report – Screen time, physical activity and sleep; a new integrated approach for children'):

<https://www.api-play.org/wp-content/uploads/sites/4/2019/01/API-Report-A-Movement-for-Movement-A4FINALWEB.pdf>

(Sigman A, 2019, Invited Commentary on 'Prospective associations between television in the preschool bedroom and later bio-psycho-social risks', Pediatric Research 85,925-926):

<https://www.ncbi.nlm.nih.gov/pubmed/30837666>

A growing body of evidence charts a decline in the physical and emotional wellbeing of young people and an increasing prevalence of mental health issues (*'Prevention better than cure', Department of Health and Social Care, 2018*) particularly in face of exam-related stress, lack of paid employment or further education and the impact of social media and inactivity.

Movement and good mental health are linked - as are higher levels of academic achievement and overall wellbeing.

The Youth Sport Trust (commissioned by Sport England) deliver an 'Active in Mind' intervention in which peer mentoring support is offered to young people who are experiencing mental wellbeing problems alongside the creation of innovative movement opportunities for a target group.

The objective is to achieve an improvement in mental health within a safe and supported environment.

The Active in Mind national pilot established 25 projects, creating a 'nurture group' climate for those young people most in need of support and using movement as a vehicle for change. The projects aim to increase the young people's daily movement and provide an alternative approach to addressing the mental health of the participant on an individual basis. They also look at lifestyle mindset and support network issues.

Each of the 25 schools shared the learning, insight and resources from their pilots with three partner schools and this was evaluated by the Carnegie Centre for Mental Health in Schools. The outcome report found that:

- 78% of participants increased their movement habits throughout the day
- 61% agreed that they were now coping better with stress and anxiety
- 71% reported feeling more relaxed after the session.

Through the Greater Manchester Trailblazer project, the Youth Sport Trust belongs to a consortium that delivers the Mentally Healthy Schools Programme.

Workshops for secondary school students who have been identified by school staff as experiencing anxiety, stress or other mental health issues, or those considered to be vulnerable ('nurture groups') were designed and delivered by Youth Sport Trust Athlete Mentors and 42nd Street Mental Health Practitioners with the intention of improving confidence and wellbeing and increasing awareness of the importance of good health. Similar workshops for a whole class of Year 5 primary pupils were also delivered by Youth Sport Trust Athlete Mentors and co-facilitated by Place2Be (P2B).

Year 10 secondary school students reported increased feelings of confidence and the acquisition of new skills as a direct result of the workshops. Similarly, Year 5 primary pupils said that they had also gained skills, boosted their confidence and gained a comprehensive knowledge of mental and physical health (*GM Mentally Healthy Schools Pilot, 2018 – University of Manchester*):

<https://www.youthsporttrust.org/system/files/Mentally%20Healthy%20Schools%20Pilot%20final.pdf>

It is now widely held that all types of physical activity could have some benefit to mental health and wellbeing but a growing number of interventions have been specifically designed to have a positive impact.

These include Get Set to Go:

<https://www.mind.org.uk/about-us/our-policy-work/sport-physical-activity-and-mental-health/get-set-to-go/>

Mini Mermaid Running Club:

<http://www.minimermaiduk.com/>

Thrive London:

<https://www.thriveldn.co.uk/>

Beat the Street delivered by Intelligent Health is an example of using digital technology to influence levels of movement in a positive way:

<https://www.beatthestreet.me/UserPortal/Default>

and the London Borough of Islington has adopted Public Health England's Change for Life: Train like a Jedi programme to encourage more young people to be active each day:

<https://www.nhs.uk/change4life/activities/train-like-a-jedi>

The links between mental health and social media use however, require further research.

In 2015, The Office for National Statistics reported that children who spent three hours upwards engaging with 'social websites' on a normal school night were *'more than twice as likely to have symptoms of mental ill-health'*, compared to others. Nevertheless, the precise nature of the relationship remains unclear and it may be possible that an individual who is already experiencing a mental health problem is more likely to use social media in this way.

The World Health Organisation has recently issued Screen Time Recommendations against a growing background of studies suggesting that excessive exposure to screens can be implicated in damaging the executive functions of the frontal lobe of the brain and exacerbating sleep disturbance, anxiety, depression and decreasing self-esteem.

France, Germany, USA, Canada, Austria, New Zealand and South Africa generally recommend screen time limits for children of all ages and the US Department of Health provides:

'recommended limits for screen time': 2-17 years 'outside of school (for nonschool work) for no more than 2 hours a day', (U.S. Department of Health and Human

Services, 2019, 'Healthy People 2020, Objective PA-8: Increase the proportion of children and adolescents who do not exceed recommended limits for screen time': <https://www.healthypeople.gov/2020/topics-objectives/topic/physical-activity/objectives>

Yet in Britain, such public health messages often encounter various obstructions with criticism of a digital culture preponderance invariably presented as an ongoing 'hotly debated' cultural (as opposed to health) issue, reflecting the hackneyed and traditional 'clash between the generations' message.

Confused British media signalling has placed parents and policy makers at odds with many of the world's major government health departments on this issue and the UK position requires clarification if successful local initiatives are to transcend their geographical boundaries and contribute to a coherent and successful national strategy.

Recommendations:

- 4.1 'Movement' to be re-positioned as part of a holistic approach to healthy living in which simple lifestyle choices can improve an individual's physical, social and mental health
- 4.2 Government to invest in a national network of after-school clubs that support young people in safeguarding their mental health, developing improved decision-making processes and interacting with role models
- 4.3 Expansion of public playground provision; reversing the current closure trend
- 4.4 Initial and continuous teacher training to contain less screen-based teaching content
- 4.5 Government to publish age-related screen times in line with WHO recommendations.

5. INTERVENTION-BASED APPROACHES TO ADVANCE POSITIVE MENTAL HEALTH THROUGH MOVEMENT

In 2011, the Chief Medical Officers (CMO) concluded that:

'Regular movement provides immediate and long-term benefits for physical and psychological wellbeing.'

Regular movement is considered to be valuable in developing motor skills, promoting a healthy weight, enhancing bone and muscular development and learning social and emotional skills. The Chief Medical Officers also warned against

a high risk of childhood inactivity leading directly to poor health in later life citing conditions such as dementia and depression (*'Start Active, Stay Active: A report on movement for health from the four home countries'*, Chief Medical Officers, 2011 Department of Health).

Ensuring that children understand and use many types of movement is therefore essential as a launch pad for a healthy life. The interventions below are illustrative of that premise.

Stormbreak - www.stormbreak.org.uk

Stormbreak CIO is a charity registered in England and Wales (Charity no 1182771) that works with primary school children and teachers in shaping a whole school approach to embedding mental health benefits through movement for every child every day. It helps schools to:

- Challenge and change perceptions of mental health
- Define a Stormbreak mentally healthy school environment and give teachers, school staff and children the tools for sustainability
- Make movement simple, inclusive and accessible, by improving school staff understanding to support mental health
- Equip school staff with the knowledge and confidence to implement Stormbreak into the daily life of the whole school.

Central to the creation of a school culture that promotes mentally healthy movement are the Stormbreak Sunrise Principles of Engagement to:

1. Reduce stigma through mainstreaming conversations about mental health in schools during movement
2. Focus on valuing the experience and process of movement rather than outcome, result or performance
3. Celebrate engagement and interaction
4. Value aspiration and competition
5. Choose the right words carefully
6. Listen carefully and with intent
7. Create a culture for movement across the school that enables a sense of connectedness and belonging
8. Generate movement environments that foster trust, kindness, respect and openness
9. Make movement simple, inclusive and accessible for everyone.

During 2018/2019, Dorset schools have been implementing Stormbreak and embedding mentally healthy movement opportunities ('stormbreaks') throughout the school day. A 'stormbreak' can focus on:

- Resilience
- Relationships
- Self-worth
- Self-care
- Hope and optimism (or a combination of these).

The initiative is in its infancy but schools are already reporting progress:

'Stormbreak has given children an opportunity within the busy school day to let off steam and explore reasons why their emotions can fluctuate, as well as understand how relationships with their peers and adults in their lives can shape the way they are feeling', Cathy, Year 6 Class Teacher.

'In smaller group sessions, children with known mental health problems and/or SEND have benefitted from smaller, more personal stormbreaks and instantly had their favourites which they wanted to do again', Chris, Primary PE Lead.

Girls Active

Funded by Sport England, Girls Active is delivered in conjunction with parallel interventions, This Girl Can and Women in Sport. It offers a flexible action-planning framework to assist teachers and girls in combining to address their individual needs.

The main objective is to enable them to understand what motivates them to move more; developing an action plan based on their feedback about delivery. Some of the girls are helped to become role models within their school, establishing leadership groups which focus on how they might make movement opportunities more appealing to their peers.

Impacts include:

- Girls happy with the way their body looked more than doubled from 25.4% to 55.5%
- Girls unhappy with the way their body looked more than halved from 36.5% to 15.6%
- Girls who felt confident to move more rose from 35.2% to 64%
- Girls who felt positive about school rose from 23.5% to 55.8%
- Girls who 'like the way they feel' after moving rose from 41.1% to 73.3%.

Youth Sport Trust Girls Active – Stepping up for Change, November 2018:
<https://www.youthsporttrust.org/system/files/resources/documents/>

Energise for Healthier Lives

E4HL is a London Borough of Camden lifestyle programme aimed at children, young people and families that are inactive and have unhealthy weight levels. The two part programme combined to provide a full support package over the course of a year.

Part One was a two-week intensive programme during the school summer vacation, consisting of a range of indoor/outdoor physical activities at a number of Camden venues (including leisure centres, parks and open spaces).

Part Two was a weekly physical activity session involving healthy eating advice and taking place on Sundays for 9 months. The scheme remained open to new participants throughout the year.

Participants increased their physical activity during Part One compared to their patterns prior to enlisting. Their average amount of physically active time was 42 hours in the 14 day period, compared with a self-reported 15 hours prior to E4HL.

The post-programme evaluation found all participants reporting that the activities were more fun in a group and appreciating the variety on offer. 91% reported that E4HL had introduced them to new activities and they recorded high levels of enjoyment. When asked to give their opinions about physical activity as a consequence of the programme, participant feedback was markedly more positive than prior to engagement with E4HL.

The Outdoor Play and Learning (OPAL) Programme has now been delivered into hundreds of schools in ten countries world-wide; reaching half a million children since 2010.

This structured, play-based intervention has been proved to succeed in every circumstance (if it enjoys the full support of the head teacher throughout) covering the 18 policy, knowledge, skills, communication and environment criteria that influence school playtime provision.

OPAL encourages schools to permit pupils of differing ages to play together once the training of all the staff who supervise playtimes has passed a critical point. Staff and the outdoor environment are by then ready, with all the 16 Play types:

<http://rphughes44.blogspot.com/>

now on offer, and once best practice is in place, bullying, accidents and boredom no longer predominate.

This positive, affordable and long-term intervention consistently produces beneficial outcomes including:

- 80% improvement in playtime behaviour
- Noticeably improved personal resilience
- Greater determination and self-regulation
- Increased happiness with school life
- Lower stress levels for pupils and staff
- Greater enjoyment in physical activities of the child's own choosing (to include 100% of older girls remaining fully active during playtime, even in years 5 and 6)
- Greater tolerance and understanding displayed by staff
- No reduction in the skills already developed in early years practice
- An average of 10 minutes extra teaching time per class after playtime and many other wellness pluses.

OPAL worldwide research has shown that children who spend increased amounts of time outdoors are more physically active, develop more secure social and emotional skills and have better self worth and mental health:

<https://outdoorclassroomday.org.uk/wp-content/uploads/sites/2/2019/05/Outdoor-Classroom-Day-Playtime-matters-report-May-2019-.pdf>

Play and Creative Arts Therapy

A Clear Sky case study shows how a play and creative arts intervention model can be used to help children who have been referred for therapy following trauma.

Play can offer a safe metaphor in which to work through abusive and traumatic experiences and the case study in question involved a qualified Play Therapist working with a child who had been living in a situation of domestic violence (although the child was not known to have experienced violence personally).

The therapist enabled the child to access relationships within a safe setting and held play explorations using musical instruments; creating patterns and rhythms through clapping, stamping and non-verbal sound. The therapist supported the child to become aware of her bodily sensations by noting upon posture changes and facial expressions exploring certain topics. The safety of dramatic distancing through play enabled the child not to be traumatised by her past and to confront her fears safely.

By the end of the intervention both home and school reported that the child had become more confident in social situations and had begun making positive friendships.

England Athletics 'Run Together'

As part of their Run Together programme, England Athletics in association with Mind are rolling out initiatives across England designed to help improve mental health through running:

<https://runtogether.co.uk/running-support>

#RunAndTalk has four key areas:

- A network of mental health champions and ambassadors who are volunteers affiliated to England Athletics and promote mental health through running
- A mental health charter for sport and recreation written for and by the sector in conjunction with Mind, Time Change and the Sport and Recreation Alliance:
<http://sramedia.s3.amazonaws.com/media/documents/a20d14f5-943c-4bcc-9991-c832d56eec0a.pdf>
- Partnerships with mental health charities
- Two campaigns per year to encourage people to #RunAndTalk 1 mile encouraging conversation with friends, families, colleagues or other runners. This initiative could be extended to schools, local community youth clubs or even the home.

#RunAndRevise targets the 16-25 age group by encouraging them to take a break from revision and examination stress and run 1 mile. The campaign (13th-19th May 2019) was designed to coincide with Mental Health Awareness week:

<https://runtogether.co.uk/running-support/runandrevise/>

Sport England

Mental wellbeing is a prime objective in Sport England's strategy, '*Towards an Active Nation*', 2016:

<https://www.sportengland.org/media/10629/sport-england-towards-an-active-nation.pdf>

To date, £8.2 million has been invested in country-wide projects where sport and physical activity have been used to improve mental health. The premise is that physical activity can improve mood, reduce stress, develop better self-esteem and prevent an onset of depression and anxiety.

Children and young people are a Sport England priority target and relevant projects have included:

Start Again Project CIC is a social enterprise project that works to understand, encourage and empower the 13-30 year old age group using the power of sport. It provides targeted and tailored activity sessions for young people within the local community led by experienced staff:

<https://www.sportenglands.org/our-work/mental-health/case-studies/start-again-makes-big-difference>

Running for My Mind is organised by Maidstone and Mid-Kent Mind; a weekly running club for people with mental health issues. So far, this flourishing club has benefitted 30 people aged between 15-70 years:

<https://www.maidstonemind.org/running-for-my-mind-fun0-run-2016/>

Parkrun - Research conducted by Staffordshire University has shown the impact that Parkrun has had on people's mental health and potential to support individuals outside traditional mental health services. Parkrun have launched an online community via Facebook aimed at encouraging more people with mental health difficulties to participate at their local parkrun:

<http://eprints.staffs.ac.uk/4443/1/Morris>

Participants from the study said that Parkrun gave them a sense of identity as members of the 'parkrun community' and reduced the stigma associated with mental health problems. The research showed that parkrun can boost confidence, reduce isolation, depression, anxiety and stress and afford participants the space to think. Junior Parkrun is available for young people aged 4-14 years old nationwide. Volunteering at parkrun was also identified as helping to increase inclusivity:

<https://blog.parkrun.com/uk/2018/10/10/research-reveals-benefit-of-parkrun-on-mental-health/>

Mind has developed online mental health awareness training for sport and physical activity in association with 1st4Sport and UK Coaching. The programme is subsidised by Sport England for a cost of £15, excluding VAT:

<https://www.ukcoaching.org/courses/learn-at-home/mental-health-awareness-for-sport-and-physical-act>

It aims to:

- Instil resilience, self-esteem and confidence
- Adapt sessions to boost inclusivity
- Enable and support mental health recovery and

- Tackle stigma and discrimination.

When evaluating the above, it should be emphasised that none use or rely upon medications. Movement and physical activity offer one of the very best antidepressant and anti-anxiety treatments.

They promote the increased efficiency of the neurotransmitters serotonin and dopamine which are the very neurotransmitters targeted by the major antidepressant medications. Physical activity upgrades them in contrast to medications which down-regulate them and in effect, physical activity and movement promote their effect long afterward, resulting in less relapse, in contrast to medications which are notorious for a revival of depression after treatment.

Recommendations:

- 5.1 Government mental health strategy should be re-positioned to embrace a holistic mind/body approach and produce a cross-Departmental Policy Consultation Paper to this effect
- 5.2 A choice of best practice initiatives to be rolled out in a national pilot, following the collation of appropriate interventions.

6. THE IMPACT OF MOVEMENT IN ADDRESSING THE EFFECTS OF SOCIAL AND ECONOMIC INEQUALITIES, CULTURAL AND ETHNIC DIVERSITY AND DISABILITY ON MENTAL HEALTH AND WELLBEING

In the UK, significant mental and physical health inequalities are influenced by factors of age, gender, ethnicity and disability:

<https://sustrans.org.uk/policy-evidence/the-impact-of-our-work/related-academic-research-and-statistics/physical-activity#cmsanchorMental Health Problems>

Young Minds has highlighted the fact that 1 in 8 children have a diagnosable mental health disorder and 1 in 6 in the 16-24 age group display symptoms common to anxiety disorder and depression:

<https://youngminds.org.uk/about-us/media-centre/mental-health-stats/>

The Royal College of Paediatrics and Child Health's 2017 report on the State of the Nation:

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/662744/State_of_the_Nation_2017 -
_Social_Mobility_in_Great_Britain.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/662744/State_of_the_Nation_2017_-_Social_Mobility_in_Great_Britain.pdf)

identified the presence of clear health inequalities between the UK's most disadvantaged children and young people and their more affluent peers. It exposed a social mobility 'postcode lottery' with the UK now one of the most unequal countries in the developed world:

<https://truepublica.org.uk/united-kingdom/truth-poverty-britain-much-worse-think/>

As opportunities for outdoor play during the school day have declined, it is reasonable to assume that children in disadvantaged areas will bear the brunt of the effect of reduced play time.

Those from highly populated or less affluent regions are less likely to either live in properties with adjoining outside 'play space', or to have access to safe, attractive community playgrounds. With reduced access to outdoor play, it is less likely that already disadvantaged children will acquire the necessary emotional, social and cognitive skills to protect them from a number of mental health problems. However, innovative play spaces can stimulate the imagination, break down social and ethnic barriers and encourage children of all abilities and backgrounds to move more.

Playgrounds should not foster inequality and the developers who decided to bar children living in social housing from using a new London playground (thus, instilling a system of segregation defined by socioeconomic status) have been widely reviled:

<https://theguardian.com/cities/2019/mar/25/too-poor-to-play-children-in-social-housing-blocked-from-communal-playground>

However, in addition to encouraging beneficial movement, public playgrounds often serve as community focal points; furthering social cohesion and unity. The resultant sense of belonging can influence the growth of a child's self-esteem as well as protecting them from mental health difficulties.

A Nottinghamshire development is a good example of the positive influence that a well-considered playground brings to a community:

'We wanted teenagers to have a dedicated area to go to meet with their friends and have fun in it. This area would prevent children from hanging around the streets and give them a safe place to go to that is socially accepted by the whole community.'

The area was designed after extensive talks with many young people to ensure the new facility met the needs of the users. We wanted to attract both boys and girls to the area and for it to lend itself to all abilities and interests. There was a need to

encourage children outdoors, as opposed to staying in playing computer games or watching television.

When a community enjoys well-planned provision there is a greater experience of social inclusion as well as the revitalisation of run-down neighbourhoods. Good play provision can also play a part in reducing crime and anti-social behaviour.'
(Derek Hayden, Rushcliffe Borough Council)

Adverse Childhood Experiences (ACEs) are traumatic childhood events that can taint an individual's physical and mental health over the life span. An ACE might be:

- Being neglected as a child
- Being physically, sexually or emotionally abused as a child
- Growing up in households where there is drug or alcohol abuse, criminal behaviour or domestic violence.

Such experiences can have a profound and protracted effect on a child's mental health:

(Di Lemma et al, 2019 'Responding to Adverse Childhood Experiences: An evidence review of interventions to prevent and address adversity across the life course', Public Health Wales, Cardiff and Bangor University, Wrexham, ISBN 978-1-78996-035-1).

Sports club participation was found to encourage resilience; helping to counter some of the pernicious ACE effects. Among children with four or more ACEs, engaging regularly with sports clubs or teams in childhood meant that they were:

- Less likely to be receiving treatment currently for a mental illness such as depression or anxiety (19%) as compared to those who had not participated in sports in childhood (25%)
- Less likely to report suicidal feelings or acts of self-harm (25%) than those who had not engaged with sports in childhood (34%)
- Less likely to have ever received treatment for a mental illness (49%) relative to those who had not taken part in sports activities in childhood (55%).

(Hughes et al 2018 'Adverse childhood experiences and sources of childhood resilience; a retrospective study of their combined relationships with child health and educational attendance', BMC Public Health; 18(1):792).

A US study ('The Role of Sport for Youth amidst Trauma and Chaos', W Massey and M Whitley, 2016, Qualitative Research in Sport, Exercise and Health, 8:5, 487-504,

DOI:10.1080/2159676X.2016.1204351) explored the role of sport in the psychological development of 10 individuals from highly deprived American communities who had experienced extreme levels of early life trauma.

Sport was pivotal during their childhoods and offered important mental health support. It acted as a safety valve and temporary respite that enabled them to protect their emotional health and find an outlet for their energies:

'Ted: I had a lot of frustration growin' up and I think that sports allowed me to separate from that. I guess you learn to compartmentalise a lot of those negative things in your life: the abuse, the drugs, and the stupid stuff that happened at home', (p494).

Sport enabled them to experience feelings of belonging and being valued and held accountable was particularly helpful for a woman who had been sexually assaulted in her teens (and later, nearly killed by her brother at high school):

'This shit is fuckin' crazy, let me go to practice. I know they give a shit about me there - in a good way and I'll be missed if I'm gone. If I don't make it to practice, they hold me accountable. I can do good there, I wanna do good there', (p495).

A study of a school-based physical activity programme in a deprived area of Santiago, Chile, recorded demonstrable improvements in pupil mental health following their experience of a more regular and intense physical activity programme. The public secondary school catered largely to children from low income families in a generally economically deprived area that was unable to provide other than limited opportunities for physical activity.

(Bonhauser M, et al, 2005 'Improving the physical fitness and emotional wellbeing in adolescents of low socioeconomic status in Chile: results of a school-based controlled trial', Health Promotion International, 20(2), 113-122).

The study compared the effects of a tailored and more intense activity programme on pupils' mental health with those of the standard exercise class. The trial recorded significant improvements in self-esteem and reductions in anxiety amongst the more physically active intervention group pupils:

- Anxiety was reduced by 13.7% in the intervention group as opposed to 2.85 in the control group
- Self-esteem in the intervention group rose by 2.3% in comparison to a drop of 0.1% in the control group.

A further study was undertaken in four elementary public schools serving large numbers of Latino and African American children from low income areas in Metropolitan Midwestern America (Carter JS et al, 'Ethnic differences in impact of physical activity programmes on psychological symptoms in youth', *Journal of physical activity and health*, 14(4), 283-289).

The intervention consisted of three hour-long physical activity sessions delivered via a weekly soccer practice. Participants also received 20 minutes of nutrition and character-building advice eg being a good team player and taking responsibility for errors. The analysis of the 24 week programme showed that overall, children in the exercise groups had lower levels of depression and better self-esteem than those in the control groups. There were statistically significant reductions in depression from African American participants (but not Hispanic participants). The findings point to a need for culturally sensitive school-based physical activity interventions.

A large-scale longitudinal study (the 1970 British Birth Cohort Study) examined the relationship between participation in various leisure activities and the wellbeing of individuals born in Great Britain in April, 1970 (Feinstein L, Bynner J & Duckworth K, 2006 'Young people's leisure contexts and their relation to adult outcomes', *Journal of Youth Studies*, 9(3), 305-327).

Data was collected from participants at ages 5, 10, 16, 26 and 30 and subsequent analysis suggested that sports club attendance had a protective effect on the wellbeing of vulnerable young people. There was an inverse association between sports participation and indicators of social exclusion (such as depression, living in temporary/social housing, homelessness, residing in a workless household and not gaining Level 2 qualifications).

The authors concluded that:

'Sports activities might well be playing an important role in ameliorating the long-term negative effects of disadvantaged family backgrounds.'

There is also a need for more research into the short, medium and long-term effects of movement and physical activity on the mental health and wellbeing of children with disabilities.

A recent Canadian publication:

<https://theconversation.com/children-with-disabilities-need-better-access-to-sport-99493>

states that:

'Multiple, well-identified barriers stand in the way of children and youth with disabilities who want - and absolutely need - to be active. Research, commentary and coverage have yet to uproot those obstacles.'

The writer contends that the existence of mental health issues (including attention deficit, anxiety and depression) is increasing in all children, but to the greatest extent in children with a disability – especially brain-based or neurodevelopmental conditions such as autism, ADHD or foetal alcohol spectrum disorder.

'Strategy and policy are important promoters of physical activity and sport, but when it comes to adapted programming for kids with disabilities, they are distinctly lacking.'

'One parent told us: 'I was so tired of this experience of trying something and having my son feel like a failure because he can't meet the expectations.' This mother and her son had both had enough.'

Children with disabilities and their families experienced additional feelings of social exclusion because of the lack of appropriate provision and professionals specifically trained to support the physical activity and movement of a child with a disability.

The 'Jooay App' has been created:

'to help children with disabilities and their families locate accessible sport and leisure opportunities close to them that suit their needs and abilities and match their preferences.'

Throughout the UK (and in many other countries) improving children's mental and physical health is of increasing importance to the Government.

The links between physical activity and mental health are being made, supported by a growing body of research, but strategies are as yet uncoordinated and there remains an unacceptable gulf in provision between 'disadvantaged' groups and those by contrast, perceived to represent 'the norm.'

Recommendations:

- 6.1 All Government policy relating to children and young people to reflect an integrated approach to mental and physical health
- 6.2 A permanent UK-wide Taskforce for Children and Young People's Mental Health to be established that brings together sector-wide experts to improve and update strategies for mental health services

- 6.3 All Government policy for the health of children and young people to undergo an Impact Assessment to ensure that it is 'fit for purpose' in serving the needs of groups perceived to be experiencing disadvantage or exclusion.

7. INTERNATIONAL MODELS OF PRACTICE FOR THE USE OF MOVEMENT TO SUPPORT MENTAL HEALTH AND WELLBEING

The World Health Organisation (WHO) has described mental health as:

'The most significant health concern for children and adolescents in development countries', (Suhrcke M, Pillas D & Selai, 2008, 'Economic aspects of mental health in children and adolescents. Social cohesion for mental wellbeing among adolescents', Copenhagen: WHO Regional Office for Europe).

The estimated prevalence of mental health disorders varies from 10-22% in young people across countries (Patalay et al, 2016, 'Mental health provision in schools', *Child and Adolescent Mental Health*, 21(3), pp. 139-147) and schools are identified as key places of support for good mental wellbeing in which it is possible to develop movement likes and dislikes which promote healthy habits of lifelong participation (Howells K, 2012, Chapter 13, 'Placing an importance on health and physical activity' in Griggs G, (ed) 'An Introduction to Primary Physical Education', London: Routledge, pp.207-220).

A recent study states that:

'School-based movement has an important role to play in protecting young people from mental illness, and has the potential to save lives through helping to reduce feelings of hopelessness, suicide and self-harm. Social interactions and resilience are particularly important and could be supported through a provision of appropriately devised physical activities, and especially team sports. Movement is especially valuable for girls in combating mild to moderate depressive symptoms. Movement selection deserves serious consideration, as inappropriate provision can worsen, rather than help, psychological problems,' (Howells K & Glibo I, 2019, 'Physical activity and mental health of school children and adolescents: A rapid review (extension)'. Presented at AIESEP, International Association of Physical Education and Higher Education, Building Bridges for Physical Activity and Sport, Garden City, New York).

Waldorf/Steiner Schools are seen across the world and the Waldorf curriculum aims to enable children to experience a sense of wellbeing (Easton F, 1997, 'Educating the whole child, head, heart and hands', *Learning from the Wald*). A key

curriculum component is 'Eurythmy' (Sobo EJ, 2014 'Salutogenic Education? Movement and whole school health in a Waldorf (Steiner) school', *Medical Anthropology Quarterly*, 20(2), pp. 137-156).

Introduced by Rudolf Steiner in 1911, it is similar to dance therapy and can act as a calming measure for children suffering from anxiety. Eurythmy is claimed to stimulate somatic healing processes through the 'soulful experience' of the movements (Bussing A et al, 2008, 'Eurythmy Therapy in clinical studies: a systematic literature review', *BMC Complementary and Alternative Medicine*, 8(8).

Research into the effect of movement and movement interventions on children's mental health and wellbeing has traditionally received far less interest than in adult populations and a welcome counterweight is offered by Bailey, Howells and Glibo (Bailey P, Howells K & Glibo I, 2018, 'Physical activity and mental health of school-aged children and adolescents: A rapid review'. *International Journal of Physical Education* pp. 1-14).

The writers examined case studies from Australia, Brazil, Canada, China, Estonia, Japan, Korea, Netherlands, Norway, UK and USA in which movement had helped to support:

- General mental health
- Children experiencing depression
- Children experiencing anxiety
- Resilience
- Social connectedness
- The prevention of suicide and lessening of suicidal feelings
- Children experiencing stress
- Children experiencing victimisation.

The authors argue that throughout the world, children are impacted by mental health issues and are being supported by means of movement interventions or school-based physical education programmes. In the majority of the studies identified, movement helps to build young people's resilience levels and this contributes to the mitigation of mild to moderate mental health conditions (studies from Australia, Brazil, Canada and the USA).

Bailey et al referred specifically to work by Vella (Vella SA, Cliff DP, Magee CA & Okely AD, 2015 'Association between sports participation and psychological difficulties during childhood: a two year follow up', *Journal of Science and Medicine in Sport*, 18(3) pp.304-309) who found that Australian children who maintained participation in sport have a lower rate of psychological difficulties than those who dropped out.

A Canadian study (Perron et al, 2012, 'Moderating effects of team sports participation on the link between peer victimisation and mental health problems', *Mental Health and Physical Activity*, 5(2), pp.107-115) of 1250 children aged 7-10, found that victimised children who had participated in team sports displayed significantly fewer depressive symptoms concurrently than non participants.

In Norway, Moljord et al (Moljord IE, Moksnes UK, Espens GA, Hjemdal O & Eriksen L, 2014, 'Physical activity, resilience and depressive symptoms in adolescence', *Mental Health and Physical Activity*, 7(2), pp. 79-85) deduced that females with low movement tended to show more depressive symptoms, suggested that movement could help to reduce depression and specifically highlighted the importance of this for girls. It is therefore important that girls in particular are informed about the key role of movement in sustaining and supporting their mental health.

Howells and Bowen's case study (Howells K & Bowen J, 2016, 'Physical activity and self-esteem: Jonny's story', *Education 3-13, International Journal of Primary, Elementary and Early Years Education*, 44(5) pp.207-220) demonstrated that physical activity-specific interventions concentrating upon movements chosen by the child within the research (shot-putt and hammer throwing) helped over a five month period to raise their severely low levels of wellbeing and self-esteem to a higher level and the individual was equipped to interact with peers, and undertake physical education lessons (areas of engagement rejected by the child prior to the movement intervention).

In 2015, the research of Ho et al from China (Ho FKW, Louie LHT, Chow CB, Wong WHS & Ip P., 2015, 'Physical activity improves mental health through resilience in Hong Kong Chinese adolescents', *BMC Pediatrics*, 15(1), pp. 48-56) examined the development of resilience and the association between movement and wellbeing of Chinese adolescents. Focusing on children aged 12-14, they recorded that movement intensity levels were correlated not only to mental wellbeing but also self-efficacy, resilience, school connectedness and family connectedness.

Recommendations:

- 7.1 Government to place movement interventions at the heart of its strategy to support the mental health of children and young people
- 7.2 This should appertain in particular to interventions designed to support pupil mental health within school; forming a central component of training for the School Mental Health Lead and for all staff undertaking Initial Teacher Training (ITT) and ongoing professional development programmes (CPD)

8. DEVOLVED UK COUNTRY MODELS OF PRACTICE FOR THE USE OF MOVEMENT TO SUPPORT MENTAL HEALTH AND WELLBEING

Following devolution in 1999, there has been increased policy divergence throughout the UK (Bevan G, Karanikolos M, Exley J, Nolte E, Connolly S & N, May, 2014, *'The four health systems of the devolved UK: How do they compare?'*, The Health Foundation & Nuffield Trust).

Independently, each country represents the varying societal and health needs of their young people and in 2011, the four Home Countries' Chief Medical Officers examined the role of physical activity for health in *'Start Active, Stay Active'*: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/216370/dh_128210.pdf

They recommended movement as contributing to the prevention of mental health problems; improving quality of life for those already experiencing them and affording immediate and long term benefit to both groups. The Chief Medical Officers considered it to be particularly beneficial for early years children and 5-18 year olds in stress alleviation, improving mood and sense of achievement and for overall good mental health and wellbeing.

England

The Association for Physical Education is calling for physical education to become a National Curriculum core subject in England alongside English, mathematics and science: Harris J, (on behalf of the Physical Education Expert Group), 2018, *'The Case for Physical Education becoming a Core Subject in the National Curriculum'*: <http://www.afpe.org.uk/physical-education/wp-content/uploads/PE-Core-Subject-Paper-20-3-18/pdf>

They contend that high quality physical education strengthens children's confidence, self-esteem and self-worth as well as enhancing social development and that through this proposed curriculum addition, children would have the potential for their mental health to be supported through movement on a daily basis.

In 2016, Howells and Bowen identified that movement can have life-changing impacts; notably improving the mental wellbeing of children who participated in a five month physical activity programme (*'Physical Activity and self-esteem: Jonny's story' as above*) and during Children's Mental Health Week in England (4-10th February 2019). Place2Be released new research including findings that 56% of

children say that they worry constantly about something at the expense of their sleep (*Research: children with less sleep are more likely to struggle with worries*): <https://www.childrensmentalhealthweek.org.uk/>

Place2Be used the Children's Mental Health Week window to publicise the need to improve physical wellbeing through movement to help support children's mental wellbeing and reduce worries to improve the sleep patterns of those children struggling with their mental health. Sleep deprivation can impact children's cognitive function and ability to cope at school.

The mental health of children in England is potentially compromised because of the current reduction in break times and negation of playful opportunities. In 2019, Baines revealed that now only 15% of infants (aged 5-7) have an afternoon break when regular breaks were historically the norm in all schools across England (*Baines E, 2019, 'Break time cuts could be harming children's development'*): <https://www.ucl.ac.uk/news/2019/may/break-time-cuts-could-be-harming-childrens-development>

This draconian reduction of playtime in English primary schools is in contrast to the successful passing in Connecticut of a Bill (*Holson LM, 2019, 'States Consider Longer School Recess, and the Adults Aren't Complaining'*): <https://www.nytimes.com/2019/02/28/nyregion/longer-school-recess-connecticut.html?fbclid=IwAROR1b7-OjBQE5At1ycBwJ-qyKsm-OcLsTjc8acoSVPxoh66XUIHMNHx-aM>

in which infant children may now enjoy at least 50 minutes of undirected play to the benefit of their overall health.

In 2019, for the first time, doctors have prescribed 'surf therapy' courses for children with poor mental health and outcomes of the Government-funded pilots show that wellbeing rises for the children concerned who are reported as feeling calmer, less angry and more connected to others, with reduced anxiety levels and increased confidence.

Wave Project 2019 (*'Our Impact'*):

<https://www.waveproject.co.uk/evaluation>

has been running for 10 years and has been shown to help children feel positive about themselves, socialise better, gain confidence and develop friendships. It is a cost-effective way in which to deliver mental health care and so far, 583 children have been referred to the programme.

Scotland

Place2Be identified that in Scotland at least three children in every class have a diagnosable mental health issue and worry about all areas of their lives; manifesting via anxiety at school and sleeping problems at home (Place2Be, 2019 'Scottish Minister for Mental Health visits Place2Be school for Children's Mental Health Week 2019'):

<https://www.place2be.org.uk/our-story/news/scottish-minister-for-mental-health-visits-place2be-school-for-children-s-mental-health-week-2019.aspx>

In 'A More Active Scotland' ('Scotland's Physical Activity Delivery Plan', The Scottish Government, 2018, Edinburgh; Crown) the Scottish Government states that positive changes are being made through movement to help support and improve mental health by boosting self-esteem. Sport Scotland's Active Schools programme encourages children to move; recognising the importance of developing basic skills and positive attitudes to movement and giving them the best chance of developing a lifelong participation in physical activity and sport.

The Scottish Government also identified a key role for teachers and early years' practitioners, suggesting that they need to increase their own confidence in the ability to integrate movements into daily activities so that they can pass this on as a life pattern for children. The Government has invested £11.6m into increasing the role of physical activity and support in physical education lessons. NHS Scotland also devised Play@home to help with child physical development and to raise the profile of movement; investing in free early learning and childcare provision with a specific focus on exploring the outdoor world through play and movements.

The 2019 position paper 'Play builds character. Children's Play Policy Forum Statement: Play Scotland' reaffirms a child's right to daily play as recognised by the UN Convention on the Rights of the Child. It states that play through physical movements can boost resilience, ability to handle stress, challenges and setbacks and recommends those daily playful opportunities within educational, home and community settings that are essential components of their physical and mental good health.

Wales

In 2012, the Welsh Government launched 'Together for Mental Health. A Strategy for Mental Health and Wellbeing in Wales':

<https://gweddill.gov.wales/docs/dhss/publications/121031tmhfinalen.pdf>

Findings included that 1 in 10 children between ages 5-16 have a mental health problem and that this is increasing. In 2019, The National Assembly for Wales

Health, Social Care and Sport Committee reported that there remains a need to increase recognition of the positive impact of movement to support children and young people's mental wellbeing (*The Physical Activity of Children and Young People*):

<https://www.assembly.wales/laid%20documents/cr-ld12369/cr-ld12369-e.pdf>

The report highlights the success of the Welsh 'Network for Health' Schools (established to support a 'whole school' ethos towards health and wellbeing; including the use of movement).

Key messages from the Welsh Sport Association are also emphasised; identifying the importance of school settings in introducing positive movement experiences that can help to shift stereotyped attitudes towards health and wellbeing. In 2020, the advent of a new school curriculum in Wales will herald a strong focus on learning physically active lifestyles that consistently demonstrate benefits to health.

The Welsh Government recognises the crucial importance of play in children's lives as expressed in its National Play Policy:

'Play is so critically important to all children in the development of their physical, social, mental, emotional and creative skills that society should seek every opportunity to support it and create an environment that fosters it. Decision making at all levels of government should include a consideration of the impact of those decisions, on children's opportunities to play':

<http://www.playwales.org.uk/eng/playhealth>

Northern Ireland

Across the UK Home Countries, Northern Ireland reportedly has the highest prevalence of mental health problems. Two years after the State of the Nation report:

https://www.rcpch.ac.uk/sites/default/files/2018-09/soch_2017_uk_web_updated_11.09.18.pdf

the country is still enmeshed in an ongoing political deadlock, resulting in a stalled position for child health policy.

Reports imply that the power-sharing impasse has left young people's mental health services in crisis:

<https://www.belfasttelegraph.co.uk/news/northern-ireland/mental-health-services-for-northern-ireland-children-not-being-addressed-because-of-stormont-impasse-37873932.html>

However, there is evidence that work is still being undertaken to address child mental health, through charity and project-based initiatives. DRILL, the Disability Research on Independent Living and Learning has commissioned the Mental Health Foundation, along with other partners including Queen's University Belfast and three Recovery Colleges (Northern Recovery College, South Eastern Recovery College and Western Recovery College) to conduct a one year pilot study to address the high levels of physical ill-health and preventable deaths of people with serious mental health problems in Northern Ireland:

<http://www.drilluk.org.uk/mental-health-and-physical-activity-in-northern-ireland/>

The project recognises an intrinsic link between physical activity and mental health and that this appears to work both ways; with increased physical activity resulting in better mental health and vice versa (Steinmo S, Hagger-Johnson G and Shahab L, 2014, 'Bidirectional Association between Mental Health and Physical Activity in Older Adults. Preventive & Medicine, 66, 74-79.)

The recommendations in the NI direct government services (2019) report '*Physical Activity*':

<https://www.nidirect.gov.uk/articles/physical-activity>

identify the impact that movement can have on improving children's sleep as well as augmenting feelings of positivity and The Northern Ireland Strategy for Sport and Physical Recreation: *Sport Northern Ireland 2009-2019 ... a culture of lifelong enjoyment and success in sport...*:

<http://www.sportni.net/sportni/wp-content/uploads/2013/03/SportMatters.pdf>

states that one of its keys to success is to ensure that children can access a variety of movement opportunities from physical education and sport lessons, to extra-curricular and extended school opportunities as well as Active Schools and community-based sport programmes to help develop physical literacy - which in turn support mental health.

Northern Ireland is also the only Home Country to name 'physical literacy' training and recognise its significance beyond physical education training within teacher training institutions as well as continual training programmes for established teachers to enhance children's movement opportunities.

The Northern Ireland Strategy for Sport and Physical Recreation has also identified the importance of creating opportunities and a range of activities for children with disabilities to ensure that they experience a variety of sport, physical activities and inclusive games.

Overall across the four Home Countries, the role of education is seen to prepare children for uncertain futures; building resilience in order to fulfil their potential

with regular movements making major contributions to children's physical, mental and emotional wellbeing.

It is important that all schools are empowered and encouraged to include daily physical movements to help promote mental health so that movement becomes a way of life that can then support children to be healthy in both body and mind.

Recommendations:

- 8.1 Stronger parity and integration across the devolved UK for physical and mental health funding, policy and workforce
- 8.2 The four Governments to establish and promote National Play Strategies that must be reflected in all policy areas involving children
- 8.3 The four Governments to support children through the inclusion of physical activity, health and wellbeing within their National Curriculum.

9. TRAINING NEEDS OF THE WORKFORCE

'The workforce' here denotes all teaching staff in daily contact with children; qualified teachers (at all career stages) trainee teachers and support staff.

The Initial Teacher Training Criteria (*DfE 2019*) details the current accepted guidelines to which all providers must adhere. The Ofsted Initial Teacher Training Handbook (2018) clarifies that inspectors must examine whether training has enabled trainees to understand early childhood development and its impact on learning.

Lumsden and Doyle (*'Child Protection and Guidance in the Early Years', 2018, p 52*) outline the '*toxic trio*' factors which impact upon early childhood experiences and can have lifelong effects on mental health; parental mental health, substance misuse and domestic violence. Child mental health issues often originate in early childhood and it is important that teachers in all phases understand that the processes that support secure attachment will lead to better long term outcomes in terms of children's educational achievement, mental health and ability to maintain relationships.

In 2019, The PHSE Association's response to the proposed changes to the PHSE curriculum gave guidance to teachers including:

- Why teaching about mental health and emotional wellbeing is important
- Key principles to facilitate safe and confident teaching about mental health and emotional wellbeing

- Building mental health teaching into a planned PHSE programme
- Addressing challenging mental health issues (eating disorders, self-harm, suicide).

In February 2019, the Department for Education published statutory guidance to accompany the introduction of compulsory health education, relationships education and relationships and sex education in 2020. The draft curriculum introduction accepts that children and young people are at risk of, and need awareness of, mental health disorders:

'Teaching about mental wellbeing is central to these subjects, especially as a priority for parents is their children's happiness. We know that children and young people are at particular risk of feeling lonely. The new subject content will give them the knowledge and capability to take care of themselves and receive support if problems arise', (DfE 'Relationships Education, Relationships and Sex Education (RSE) and Health Education. Draft statutory guidance for governing bodies, proprietors, head teachers, principals, senior leadership teams, teachers', February 2019).

The proposed PHSE curriculum places increased focus on the role that physical exercise, time outdoors and community participation have on wellbeing and happiness. The physical space in which the teaching occurs is also seen to be relevant. Forest schools and learning outside the classroom offer children chances to move on a larger scale and in an environment that is different from the familiar school setting.

Moving outside can reduce behaviour problems, develop the ability to cope with uncertainty and provide the challenge and opportunity to take an acceptable level of risk.

Teachers must be helped during training to understand the range of opportunities offered by 'movement'; times for example when very little movement is needed such as mindfulness and meditation and occasions when movement is undertaken to develop skills and whole-body health (physical education, sport, active classrooms and physical activity).

Deciphering child need within a group is complex and teachers will require support in embedding appropriate practices into their daily routine and curriculum (and in the case of specific individuals, when it is an essential part of their existence).

Lumsden and Doyle (2018 as above) understand that learning difficulties can puncture a child's confidence with adverse mental health outcomes. Children with

additional needs in a classroom setting may have very particular movement-related requirements (for example, physiotherapy, use of various 'comfort' toys) and teachers should be equipped to work closely with support staff, school nurses and Special Educational Needs Coordinators (SENDCos) in order to implement tailored strategies. SENDCos similarly must be afforded the time to disseminate training and plan with the teachers, parents and child, appropriate opportunities for movement within their support structure.

Within the curriculum, music, dance, drama and singing are sources of opportunity to enhance mental wellbeing.

Movement is embedded within rhythm, breathing and repetition and can have a significant therapeutic impact. The Cultural Learning Alliance report that individuals participating in arts-based activities are 38% more likely to report good health and the nurturing of creativity, innovation, empathy and resilience (*Cultural Learning Alliance. 'Key Research Findings: the case of Cultural Learning'*): <https://culturallearningalliance.org.uk/evidence/key-research-findings-the-case-for-cultural-learning/>

However, teachers sometimes express a lack of assurance in teaching arts-based subjects and training is necessary for them to acquire the confidence to deliver a broadly balanced arts-enriched curriculum.

The benefits of freely chosen, active play with movement at its heart are regularly reiterated within an ever-growing body of accredited worldwide research; however, this is not represented in official DfE training schemes.

In the 400 primary (and secondary where the head teacher is fully supportive) schools in the UK, Canada and eight other countries where the OPAL programme is delivered the situation is very different.

OPAL (Outdoor Play and Learning as above) provides a sustainable, successful and clearly structured approach to the environmental and cultural changes required for a school to deliver the high quality play experiences that promote mental awareness, health and wellbeing in every pupil. All 16 recognised play types are constantly available in OPAL schools and staff know what to look out for to ensure that every child's needs are constantly met.

The staff who supervise playtimes learn, as part of Opal training:

- What play is as a technical activity
- What the law requires of them (so that they can focus on enabling play rather than putting barriers in the way)

- How to work a a team
- How to develop the physical play space of a school
- How to advocate for play with parents and other adults
- How to resource suitable play equipment when money is restricted
- What good landscape design looks like and how to achieve it on a budget
- How to ensure use of the entire asset that a playground and playing field offer
- How to ensure equality of access to playful, educational experiences for all children
- The role of leadership (head teachers, senior staff, governors).

If play training were to be a part of all teacher professional development, benefits to children and their teachers' mental and physical wellbeing would increase, making potential long term financial savings for the NHS in the treatment of some diseases.

The Mental Health Core Skills Education and Training Framework (commissioned and funded by the Department of Health and developed in collaboration by Skills for Health, Skills for Care and Health Education England) contains practice and evidence based guidance:

<https://www.skillsforhealth.org.uk/images/services/cstf/Mental%20Health%20CSTF.pdf>

This comprehensively designed approach to the education and training of the health and social care workforce seeks to promote further understanding of mental health and wellbeing throughout the general population. It alerts all concerned to the availability of support for developing appropriate, consistent workforce education and training across the relevant sectors.

In the framework, beneficiaries of the training and education are defined in three tiers:

- People requiring general mental health and awareness
- Staff in contact with children
- Staff supporting children, young people, working age adults and older people who may experience a mental health problem.

The framework addresses core skills and knowledge; ie that which is common and transferable across different areas of service provision. Specialised skills and knowledge are taken into account in the Mental Health Core Skills Education and Training Framework and discretionary local needs are signposted for consideration within the specific context of occurrences (such as determined by risk assessment or policy).

Mentoring could also be added to the training resources available to professional staff responsible for supporting children's mental health. Through a mentoring approach, it may be possible to ameliorate the stress factors involved in working in challenging contexts with challenging children and young people:

'When you're close to burnout, there's a fine line between coping and not coping' (Health, Jobs & Mental Health', Michael Musker, June 2019).

The interdependence developed in the participants of a mentoring approach can provide intangible and tangible synergy across the range of approaches used to train and educate professionals; building insight, resilience, making use of core skills to address issues of concern and for further development.

Recommendations:

- 9.1 Greater importance to be placed for primary and secondary trainees on an understanding of child developmental theory, attachment theory and how this can impact learners, making them better equipped to improve long term outcomes for children
- 9.2 The proposed changes to the PHSE curriculum and its statutory status mean that teachers and support staff will require appropriate support and training to be able to deliver the new content effectively
- 9.3 Teachers will need support from senior leaders to feel confident in the school's learning philosophy; affording sufficient time to embed movement activities must be supported instead of dismissed as detrimental to 'results-based' education
- 9.4 Play training to be a core component of all professional training for early years and primary school teachers and support staff
- 9.5 Development of an online mentoring approach to accompany the workforce and support them through potential working challenges
- 9.6 Teacher pre and in service programmes to include comprehensive training in wellbeing and creative affectively-based pedagogies
- 9.7 Additional resources for primary and secondary schools to access professional development opportunities in how to enhance wellbeing through movement / how to assess movement in order to enhance wellbeing
- 9.8 Teachers should have awareness of the therapeutic nature of movement in supporting mental health. Training needs include being equipped with a range of activities and strategies to offer to children and young people.

10. MOVEMENT AND POSITIVE MENTAL HEALTH: THE WAY FORWARD

21st century children are facing an entirely new childhood experience in that movement for many is minimal in comparison to previous generations. Throughout the course of this report, it has been demonstrated that movement is both central and fundamental to children's positive mental health.

In a new study on the link between outdoor play and '*internalised mental health symptoms*' among 29,784 students aged 11-15 years, researchers found that even spending on average more than 30 minutes a week outdoors was associated with a 24% lower rate of '*high psychosomatic symptoms*', (Piccininni C, Michaelson V, Janssen I, & Pickett W, 2018, '*Outdoor play and nature connectedness as potential correlates of internalised mental health symptoms among Canadian adolescents*', *Preventive medicine*, 112, 168-175).

Similarly, it is known that a majority of children aged between 4-12 '*in western countries*' now play outside for less time each day than prisoners get; that inactivity (especially outdoors) is leading to a wide range of child health concerns including low self-esteem, weak social development and anxiety issues in addition to physical ailments:

<https://www.abbynews.com/news/b-c-to-fund-programs-to-help-kids-deal-with-anxiety/>

and that 'nature deficit disorder' has become a serious matter for debate amongst experts:

https://en.wikipedia.org/wiki/Nature_deficit_disorder

Within the approximately 20,000 primary schools in the UK, ever-shrinking playtime and poor use of play space (typically primary schools only use their full playing field asset for 8-12% of the year (*Data from 50 OPAL schools*):

www.outdoorplayandlearning.org.uk

are contributing to a growing child mental health crisis. However, by instigating and implementing the correct changes over a 12-18 month period to a school's culture and physical environment (including dedicated training and support for staff and parents) this alarming trajectory can be reversed (*OPAL as above*).

Outside the school setting, the closure of public playgrounds in one of the most densely populated and urbanised countries in Europe, is depriving children of environments in which they can:

'Experience and interact with their social and physical environment, recognise and test their own abilities and develop social, physical and motoric skills', (Reimers A, Schoeppe S, Demetriou Y, & Knapp G, 2018, '*Physical Activity and Outdoor Play of*

Children in Public Playgrounds - Do Gender and Social Environment Matter?', International Journal of Environmental Research and Public Health', 15(7), 1356).

The ubiquity of digital culture has created a strong inducement to remain indoors and stay still - at the same time as a striking and sustained reduction in opportunities for outdoor play. For the overwhelming majority of UK children (especially those living in urban areas) this is a toxic cocktail. Children are being 'pulled' indoors by screens and 'pushed' away from outdoor play.

To combat the dominance of discretionary screen time (DST) parents/carers must be made aware that movement is a non-negotiable for children's mental and physical wellbeing and how, at a sheer 'hours-per-day' level, the dissuasive influence of DST over child movement may lead to the profound displacement of vital movement activities.

Here, parental monitoring of their child's behaviour patterns and the establishment of discretionary screen time limits (as discussed earlier) can shape long-term media consumption habits and may prove to be an inhibitor of mental health problems such as screen dependency disorders (*Sigman A, 2017, 'Screen Dependency Disorders: a New challenge for child neurology', Journal of the International Child Neurology Association', ISSN 2410-6410; Sigman A, 2019, Invited Commentary on 'Prospective associations between television in the preschool bedroom and later bio-psycho-social risks', Pediatric Research 85, 925-926*):

<https://doi.org/10.1038/s41390-019-0357-0>

In conclusion, while what occurs in school and community settings from early years onwards is authoritative, the influence of parent/carer role-modelling is paramount.

High adult levels of discretionary screen time in the home will influence the independent patterns adopted by the children who live there and parents who are more physically active are likely to have children who move more; to the benefit of their mental health in all the ways that are described throughout this report.

Parents want the best for their children and rather than resenting perceived interference from a 'nanny state' are seeking guidance and finding all too often that there is simply none forthcoming.

They need help from trusted individuals in positions of responsibility outside their immediate family. In this way, they will be empowered to create the time and opportunity in which to enable their children to develop the healthy movement

behaviours that will enrich their physical and mental wellbeing for life... and thereby the lives of the generations to come.

Recommendations:

- 10.1 Government to provide training for teachers in what is meant by 'good' mental health in addition to the proposed initiatives to help them to recognise early signs of poor mental health in their pupils:
<https://theconversation.com/teachers-key-to-getting-early-help-for-children-with-mental-health-issues-33861>
- 10.2 Government to make statutory provision that every primary school must provide a minimum of 75 minutes of actual play activity (separate from eating/queuing times) of a specified high quality every day
- 10.3 School holidays should enable children to access enjoyable and freely chosen play experiences, supported as appropriate by trained, funded staff in the green space of economically deprived communities that need it:
<https://www.childrenssociety.org.uk/good-childhood-report-2017#paragraphs-item-538>
- 10.4 Funding of public playgrounds to be prioritised by policy-makers and closure programmes halted, because playgrounds fulfil a unique role in improving children's movement, social interaction, fitness and physical and mental health
- 10.5 Doctors, nurses and teachers in early education settings and primary schools to provide pre-emptive guidance to parents/carers about limiting media use in the home, raising the age for screen use, reducing the degree of exposure and discouraging screens in children's bedrooms
- 10.6 Policy-makers to adopt a holistic mind/body approach to children's health and for this to be instilled at all levels of training for doctors, nurses and other health professionals.