

Agenda – Health, Social Care and Sport Committee

Meeting Venue:	For further information contact:
Committee Room 2 – Senedd	Claire Morris
Meeting date: 1 March 2018	Committee Clerk
Members’ pre-meeting: 09.15	0300 200 6355
Meeting time: 09.30	SeneddHealth@assembly.wales

Informal pre-meeting (09.15 – 09.30)

1 Introductions, apologies, substitutions and declarations of interest

2 Inquiry into physical activity of children and young people – evidence session 2 – panel of academics

(09.30 – 10.30)

(Pages 1 – 36)

Dr Nalda Wainwright, Wales Institute for Physical Activity

Professor Mark Hanson, University of Southampton

Professor Simon Murphy, Cardiff University

Break (10.30 – 10.45)

3 Inquiry into physical activity of children and young people – evidence session 3 – Sport Wales

(10.45 – 11.30)

(Pages 37 – 41)

Sarah Powell, Chief Executive Officer, Sport Wales

Graham Williams, Director of Engagement, Sport Wales

Break (11.30 – 11.35)



**4 Inquiry into physical activity of children and young people –
evidence session 4 – Disability Sport Wales**

(11.35 – 12.20)

(Pages 42 – 48)

Fiona Reid, Chief Executive Officer, Disability Sport Wales

Michelle Daltry, Partnership Manager, Disability Sport Wales

Break (12.20 – 12.25)

**5 Inquiry into physical activity of children and young people –
evidence session 5 – Children's Commissioner for Wales**

(12.25 – 13.00)

(Pages 49 – 58)

Sally Holland, Children's Commissioner for Wales

Emma Curtis, Policy Adviser

Andy Wallsgrove, Head of Practice

**6 Motion under Standing Order 17.42 to resolve to exclude the
public from the remainder of the meeting**

Lunch (13.00 – 13.30)

**7 Inquiry into physical activity of children and young people –
consideration of evidence**

(13.30 – 13.40)

**8 Public Health (Minimum Price for Alcohol) (Wales) Bill –
consideration of draft report**

(13.40 – 14.25)

(Pages 59 – 144)

**9 Public Health (Minimum Price for Alcohol) (Wales) Bill – Order of
Consideration – agreement in principle ahead of Stage 2
proceedings**

(14.25 – 14.30)

(Pages 145 – 149)

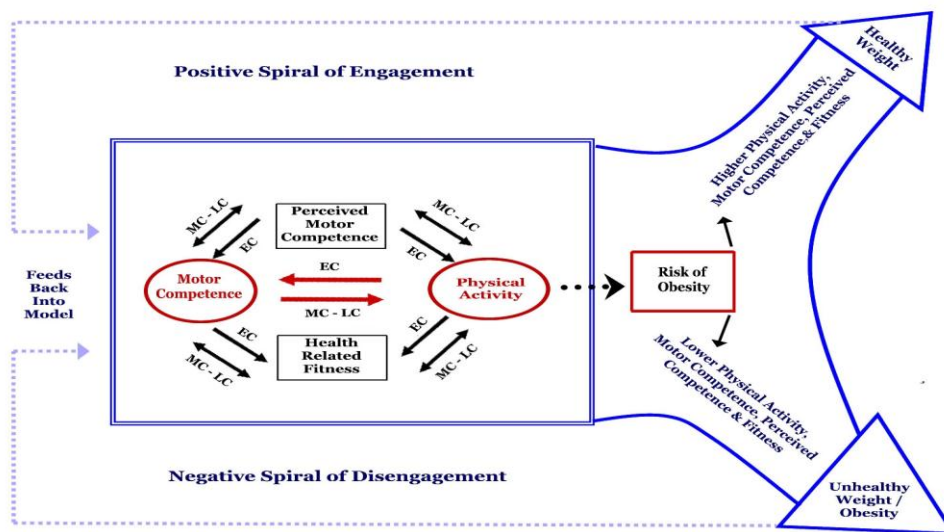
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Key Messages

- Developing competent and confident movers in early childhood is critical to a positive developmental trajectory and lifelong physical activity.
- The interaction between physical activity, motor competence, fitness and perceived competence in relation to lifelong physical activity and health is highly complex.
- Children in Wales are entering the education system without the physical competence required to support appropriate levels of physical activity and are likely to be delayed in their physical development.
- High quality developmentally appropriate movement experiences are essential for developing positive attitudes for lifelong physical activity and these require highly trained teachers.
- A structured programme of professional development and training in pre-school settings and the Foundation Phase in Wales has a significant impact on pupils' physical competence
- Incorporating Successful Kinesthetic Instruction for Pre-schoolers into the Foundation Phase through a whole school and community approach is a cost effective sustainable approach for developing physical competence and key factors relating to physical activity levels in children and adolescents.

1. Over 30 years of global research in motor development shows us that developing competent and confident movers in early childhood is critical to a positive developmental trajectory and lifelong physical activity^{1,2,3,4,5,6,7}. In very early childhood and infancy motor competence is affected by biological maturation, however as children become more mobile the quality of the environment and movement experiences they are exposed to is crucial to the development of core stability, co-ordination and motor competence^{7,8,9}. During early childhood children must develop key foundational skills called fundamental motor skills (FMS) and knowledge of movement concepts^{8,9}. Fundamental motor skills consist of object control skills like throwing and catching and locomotor skills such as running and jumping⁷. These movement concepts and FMS are equivalent to the movement alphabet and form the foundation of sports, games and lifetime activities^{5,6,10,11}.
2. Multiple models of motor development highlight the importance of FMS for children to be physically active across the lifespan^{12,3}. Drawing on the fields of motor development, psychology and health, Stodden et al.'s³ model shows the complex relationship between physical activity, competence and perceived competence and fitness in relation to lifelong physical activity, obesity and health (Fig 1)
Fig 1. Motor developmental model showing the resulting health trajectories



Stodden, D., Goodway, J., Langendorfer, S., Robertson, M., Rudisill, M., Garcia, C. and Garcia, L. (2008)

This model shows us that very young children need movement to develop the prerequisites for motor competence, such as core stability, balance and co-ordination. Developing motor competence enables them to be more physically active and gain fitness. The more they are active the more competent they become and so on resulting in them entering a positive spiral of engagement in physical activity and healthy weight.

This is further complicated by a child's perception of their ability, their perceived physical competence, which drives motivation for physical activity (if I think I am good I will take part, if I think I am rubbish I won't). In early childhood before the age of seven, children are not able to make an accurate judgement of their ability and think if they try hard they are great. Hence this gives us a window of opportunity to develop children's competence to a level that they will perceive as good^{3,5,7}. It is crucial to progress children along a motor developmental pathway as pupils that have a slow rate of progress are several times more prone to become overweight or obese at the end of primary school¹². A seven year longitudinal study to test Stodden et al.'s model found that physical activity, motor competence and fitness collectively have a longitudinal impact on body fatness. Motor competence and fitness have the greater influence and as such the study highlights that physical activity interventions focusing on the development of motor competence and fitness in early childhood can have a sustainable impact on maintaining a healthy weight status, or even reducing fatness across childhood and adolescence¹³.

Overall motor competence is a key factor influencing children's physical activity levels across childhood. Thus it is not enough to just promote physical activity in children we must ensure that children become motor competent during the early childhood years if they are to access a healthy active lifestyle.

- Children in areas of socio economic deprivation in Wales are entering the education system without the physical competence required to support appropriate levels of physical activity and are likely to be delayed in their physical development^{15,16}. This mirrors the international evidence that children growing up in poverty are

developmentally delayed in their FMS placing them at greater risk of negative health outcomes, physical inactivity and poorer academic achievement^{7,17}. Children who are delayed in FMS are less likely to be physically active both now and in the future and as a result have few opportunities to change their motor competence status¹⁷. Over time, developmental delay results in low perceived motor competence, which impacts a child's desire and motivation to be active^{5,6,18}. These factors interact together to pull a child into a negative spiral of dis-engagement resulting in a child who will be inactive across time and more likely to be an unhealthy weight. Such children will have greater health risks and greater rates of hypokinetic disease than children who are motor competent and physically active. Societal changes seeing increased use of equipment such as baby seats, bouncers and buggies, coffee shop culture replacing visits to parks, a huge increase in children's screen time, a lack of green space and limited free play has created a 'perfect storm' for inactivity and motor developmental delay so that children from all socio-economic backgrounds now lack necessary movement opportunities^{19,20}.

We need to look to schools as a key element in the development of motor competence and as a hub for building community capacity for supporting and sustaining physical development. However, despite the importance of the role of the teacher in developing motor competence, the majority of early childhood teachers and primary school staff are inadequately prepared with the knowledge and skills to enhance their pupils' motor development^{15,16}.

4. Fundamental Motor Skills (FMS) do not naturally develop as part of childhood⁷. It is a common misconception that proficiency in FMS naturally emerges as a part of the normal activities of childhood⁷. Consistent evidence suggests that like many other academic skills FMS need developmentally appropriate instruction and opportunities to practice skills in enriched learning environments in order to become motor competent. Although high quality play is an important part of the early years experience, this alone has not been found to change FMS development^{17,18,21}. Although research in the Foundation Phase has shown that a high quality play based curriculum can develop locomotor skills, this is still not sufficient for the development of object control skills which are closely aligned to many sports and activities^{14,15,16}. Of particular concern is that the development of object control skills in early childhood is significantly related to later adolescent physical activity⁴.

The lack of specialist knowledge in physical education in Primary Schools and the rise in cheaper curriculum delivery by outside agencies, NGB coaches and private companies means that adults who are not qualified teachers and have little knowledge of child development are coaching skills rather than teaching children²². Foundation Phase and primary school teachers with an in depth understanding of early childhood pedagogy need professional development to apply their pedagogical skills to the physical development aspect of the curriculum. The skill of the teacher is crucial as children progress through school if they are to continue to engage in physical activity^{23,24}. A systematic review of international studies of approaches that promote physical activity in children and adolescents found that the most important factor was an appropriate teaching approach from an expert physical education teacher and that professional development of teachers to achieve this should be founded on an understanding of teacher learning in order to have an impact on student learning²⁴.

5. In light of this and drawing on research which identified a gap in teachers' knowledge, a programme of training and support was implemented in target schools in Wales. An evidence based programme of professional development, Successful Kinaesthetic Instruction for Pre- schoolers (SKIP) has been used to train teachers, teaching assistants and parents about the importance of early movement for child development¹⁰. Teachers learn how children move through developmental stages in their motor competence and how they can alter tasks and the environment to progress pupils to achieve mastery of skills needed for life long physical activity. Target schools have primarily been in areas of socioeconomic deprivation, where engagement with parents has historically been a challenge. The project also involved running parental engagement sessions and parents taking equipment home to play with their children. Parents have been highly engaged and in some cases taken over the running of sessions. SKIP has been adapted to be incorporated into the Foundation Phase play based approach in Wales. Research into the effectiveness of this programme of professional development and support in West Wales found that pupils significantly improved their FMS after as little as 8 weeks whilst there was no significant change in the control group²⁵.
6. With schools and early childhood settings acting as hubs in the community, parents, grandparents and whole communities have worked to support the physical development of pupils in a highly cost effective and sustainable way impacting over 5000 pupils' physical competence in the region²⁵. Importantly whole schools and communities have developed an ethos of valuing physical activity and continued to support this in after school and holiday opportunities. Key to this success is the understanding of the importance of movement in early childhood to lay the foundations for lifelong physical activity and crucial to this is training staff to understand physical development pedagogy.

Dr Nalda Wainwright [REDACTED]

References

1. Clark, J.E. and Metcalf, J.S. (2002) 'The mountain of motor development: A metaphor', in Clark, J.E. and Humphrey, J.H. (ed.) *Motor Development: Research and Review*: vol. 2, Reston, VA: NASPE Publications, pp. 62-95.
2. Seedfelt, V. (1980) 'The concepts of readiness applied to motor skill acquisition', in Magill, R.A., Ash, M.J. and Smoll, F.L. (ed.) *Children in Sport*, Champaign, IL: Human Kinetics
3. Stodden, D., Goodway, J., Langendorfer, S., Roberton, M., Rudisill, M., Garcia, C., and Garcia, L. (2008) 'A Developmental Perspective on the Role of Motor Skill Competence in Physical Activity: An Emergent Relationship', *Quest*, 60(2), pp. 290-306.
4. Barnett, L., van Beurden, E., Morgan, J., O Brooks, L. and Beard, J. (2009) Childhood Motor Skill Proficiency as a Predictor of Adolescent Physical Activity. *Journal of Adolescent Health* 44(3) pp 252-9
5. Barnett, L., Stodden, D., Cogen, K., Smith, J., Lubans, D., Lenoir, M., Livonen, S., Miller, A., Laukkanen, A., Dudley, D., Lander, N., Brown, H. and Morgan, P. (2016) Fundamental Movement Skills: An Important Focus. *Journal of Teaching in Physical Education* 35(3) pp. 219-225
6. Stodden, D., Gao, Z., Goodway, J. and Langendorfer (2014) Dynamic Relationships Between Motor Skill Competence and Health-Related Fitness in Youth. *Pediatric Exercise Science*, 26, pp. 231-241
7. Gallahue, D.L., Ozmun, J.C. and Goodway, J.D (2012). Understanding Motor development:

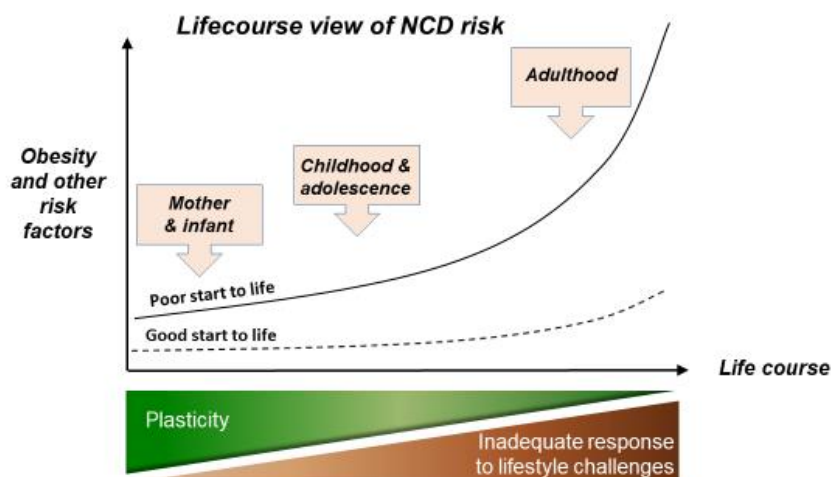
Infants, Children, Adolescents and Adults (7th Edition), Boston: McGraw-Hill.

8. Maude, P. (2010) 'Physical literacy and the young child', in Whitehead, M.E. (ed.), *Physical literacy throughout the lifecourse*, London: Routledge.
9. Maude, P. (2013) 'Growing Physical Literacy in the Young Child', *ICSSPE Bulletin - Journal of Sport Science and Physical Education*, vol. 65. pp. 118-103.
10. Goodway, J.D., Brian, A., Chang, S.H., Famelia, R., Suda, E. and Robinson, L.E. (2013), 'Promoting Physical Literacy in the Early Years Through Project SKIP' *ICSSPE Bulletin - Journal of Sport Science and Physical Education*, vol. 65, pp. 121-129.
11. Lubans et al., 2010 Fundamental movement skills in children and adolescents. *Journal of sports medicine* 40(12) pp.1019-35
12. Rodrigues, P., Stodden, D. and Lopes, V. (2015). Developmental pathways of change in fitness and motor competence are related to overweight and obesity status at the end of primary school. *Journal of Science and Medicine in Sport*. Vol. 19(1) pp 87-92
13. Lima, R., Pfeiffer, K., Bugge, A., Møller, N., Andersen, L. and Stodden D. (2017) *Motor competence and cardiorespiratory fitness have greater influence on body fatness than physical activity across time*. *Scandinavian Journal of Medicine and Science in Sports*. 00:1 – 10. <https://doi.org/10.1111/sms.12850>
14. Wainwright, N., Goodway, J., Whitehead, M., Williams, A. and Kirk, D. (2016) The Foundation Phase in Wales – A play-based curriculum that supports the development of physical literacy. *Education 3-13* Vol 44(5)
15. Wainwright, N., Goodway, J., Whitehead, M., Williams, A. and Kirk, D. (2017) Laying the foundations for physical literacy in the Foundation Phase in Wales: The contribution of the Foundation Phase to the development of Physical literacy. *Physical Education and Sport Pedagogy* (in review)
16. Wainwright, N. (2017) Physical Literacy in Wales (part two) – identifying the gap *Physical Education Matters* Autumn Vol 12 (3) (in press)
17. Goodway, J.D. and Branta, C.F. (2003) 'Influence of a motor skill intervention on fundamental motor skill development of disadvantaged preschool children', *Research Quarterly for Exercise and Sport*, 74(1), pp. 36-46.
18. Breslin, G., Murphy, M., McKee, D. and Delaney, B. (2012). The effect of teachers trained in a fundamental movement skills programme on children's self-perceptions and motor competence. *European Physical Education Review* Vol.18(1) pp 114-126
19. Wainwright, N., (2017) *Improving physical literacy to survive a perfect storm*. International Physical Literacy Conference, Toronto 12th April 2017
20. Wainwright, N. (2017) *Developing and supporting physical literacy in Wales*. Change the game conference. Umea, Sweden 14th – 17th September.
21. Goodway, J.D., Crowe, H. and Ward, P. (2003) 'Effects of Motor Skill Instruction of Fundamental Motor Skill Development', *Adapted Physical Activity Quarterly*, 20(3), pp. 298-314.
22. Jones, L. and Green, K. (2017) Who teaches primary physical education? Change and transformation through the eyes of subject leaders. *Sport, Education and Society*, Vol.22(6) pp 759-771
23. Männistö, J-P., Cantell, M., Huovinen, T., Kooistra, L and Larkin, D. (2006) A school-based movement programme for children with motor learning difficulty. *European Physical Education review*. Vol. 12(3) pp.273-287
24. Dudley, D., Okely, A., Pearson, P and Cotton, W. (2011). A systematic review of the effectiveness of physical education and school sport interventions targeting physical activity, movement skills and enjoyment of physical activity. *European Physical Education Review*. Vol.17(3) pp 353-378
25. Wainwright, N., John, A., Edwards, K., Piper, K. and Goodway J., (2017) *Examining the Impact of incorporating Successful Kinesthetic Instruction for Pre-schoolers (SKIP) in the Foundation Phase on Young Children's Motor Development*. NAPSPA, San Diego June 2017

**Inquiry into physical activity for children and young people: Outline for oral evidence from
Professor Mark Hanson, University of Southampton**

Professor Mark Hanson has worked with a range of national and international organisations, developing an important advocacy role in the area of early life prevention of non-communicable diseases (NCDs). He co-chaired the Science and Evidence Working Group for the WHO Director-General's Commission on Ending Childhood Obesity, which reported in 2016, WHO initiatives on children's environmental health, and the life course approach to healthy ageing. He advised the Chief Medical Officer, England, on issues related to preconception health, poverty and childhood obesity and authored the chapter on Preconception Health in her annual report of 2014 (The health of the 51%: Women). He was an expert witness at the British-Irish Parliamentary Assembly Meeting on childhood obesity (July 2017).

The University of Southampton pioneered the field of Developmental Origins of Health and Disease (DOHaD), especially the importance of a life course approach (see Figure). Research has revealed that NCD risk is passed across generations, starting before birth, and involving parents' diets, lifestyle and health behaviours. Thus, some children, especially those from lower resource backgrounds, start life at a disadvantage. This magnifies the detrimental effects of unhealthy lifestyle later, increasing NCD risk. Preventative interventions therefore need to commence early in the life course, even with children and young people before they become parents. They need to focus on increasing physical activity, healthy diet, limiting alcohol consumption, preventing smoking, reducing stress and ensuring healthy sleep behaviours.



There is strong evidence that participation in physical activity and sports in school-aged children are important predictors of adulthood participation, and physical inactivity in particular tends to track into adulthood. Studies also suggest that exercise propensity along with appetite and food preferences may be set in early life, further highlighting the need for early intervention.

Among the BIPA jurisdictions, Wales has the highest rates of childhood obesity - over 35% of boys and 33% of girls are either obese or overweight. Results from the Child Measurement Programme (CMP) for Wales 2015/16 show that more than a quarter of children (26.2%) in Wales were overweight or obese in reception year. Many children lack the basic knowledge about physical activity behaviours to

lead healthy, active lifestyles, leading to high levels of physical inactivity and sedentariness among children in Wales.

Factors shaping barriers to physical activity in different age groups within the range of 5-18 years show great disparity, so a 'one size fits all' approach tends to fail. Hard-to-reach groups that require particular attention include overweight/obese children, children with disabilities, children from deprived backgrounds and, sometimes, young girls in particular. Recognising these differences and tailoring interventions based on context and age group is key to using the life course approach to bring about changes in health behaviours.

Large-scale physical fitness testing is often costly and alone, will not necessarily improve levels of physical activity. Physical activity promotion strategies should be employed in conjunction with any fitness testing. Fitness testing should be embedded within a supportive learning environment, as a component of an educational setting that promotes physical literacy and inclusivity. National level surveys may help develop a benchmark, but individual level programs are needed to bring about behaviour change. If fitness testing is to be implemented, other elements of behaviour change such as goal setting need to be included, along with a plan for evaluation.

Recognising the need to improve the capacity of young people to make better health decisions, by improving their health literacy and supporting behaviour change, in Southampton we pioneered the LifeLab programme, which uses hands-on experiments to show teenage schoolchildren how their lifestyles affect their bodies. Partnering with Southampton University Hospitals NHS Trust, Southampton City Council and local schools, LifeLab has provided training to teachers and welcomed 7500 children to its facilities. We have found that the programme significantly changes teenagers' knowledge and attitudes, but that more is needed to effect actual behaviour change. We are currently developing a digital platform to enhance and support the children's learning, which we propose may positively impact upon behaviour change for those attending the LifeLab programme.

We have now taken this initiative further by developing an educational intervention for primary schools, Early LifeLab (see brochure). The programme aims to empower children and develop their scientific enquiry skills by answering their own questions about health. Working directly with primary teachers in their schools, and providing all training and necessary resources to integrate Early LifeLab with the EYFS and National Curriculum, Early LifeLab is intended to motivate children from the Foundation Stage onwards to make better decisions about their health behaviours, such as levels of physical activity and the food they eat.

The efficacy of multi-component interventions suggests that the aim of physical activity-based interventions should not only be to increase exercise or physical activity levels, but also to achieve a sustainable healthy lifestyle that includes maintaining a healthy BMI, achieving optimum nutrition, promoting healthy sleep behaviours, improving health literacy, and reducing sedentary activities and screen time. The UK government, in 2017, announced the allocation of funding from the soft drinks levy to support sport in schools and prevent childhood obesity. Interventions that promote attainment in STEM subjects along with health education, going beyond traditional sport, have the potential to provide excellent value for money.

Inquiry into physical activity for children and young people
Response from the University of Southampton

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1. Background

The increased numbers of obese and overweight children, and the associated health risks, have warranted widespread efforts towards preventive measures. Results from the Child Measurement Programme (CMP) for Wales 2015/16¹ show that more than a quarter of children (26.2%) in Wales were overweight or obese in reception year. While both diet and physical activity are important to achieving and maintaining healthy weight in children and adolescents, in this report we focus on the role of physical activity-based interventions in preventing obesity, and attaining a sustainable healthy lifestyle. The current UK Chief Medical Officer's guidelines for physical activity for 5-18 year olds recommend 60 minutes of physical activity, through a range of sources every day². In Wales, only 59% of boys and 42% of girls aged 4 to 15 years were active for at least 60 minutes per day, in five or more days in the past week, in 2012³. Time allocated for physical education in primary schools also varied, with the recommended two hours of physical activity per week being delivered to younger students more often. This was much lower in 7 to 11 year olds, with only 15 % of schools providing two hours per week. With many children lacking the basic knowledge about physical activity behaviours to lead healthy, active lifestyles, levels of physical activity and sedentariness among children in Wales are some of the poorest globally⁴.

2. A life course approach to preventing obesity, improving health behaviours

There is strong evidence that participation in physical activity and sports in school-aged children are important predictors of adulthood participation, and physical inactivity in particular tends to track into adulthood. A life course approach to preventing later life disease stresses a temporal and social perspective, looking back across an individual's or a population's life experiences to identify risk factors for current patterns of disease. It is supported by the concept of the Developmental Origins of Health and Disease (DOHaD) which suggests that physical and social hazards before and during pregnancy, childhood, adolescence, young adulthood and mid-life can affect chronic disease risk and health outcomes in later life⁵. There is also evidence of acquiring greater social and cognitive skills, habits, coping strategies, attitudes and values during childhood and adolescence than at later ages, which influence life course trajectories and have implications for health in later life. The World Health Organization's (WHO) Commission on Ending Childhood Obesity (ECHO)⁶ considers a life course approach as a key factor to preventing childhood obesity. The report was developed following extensive global consultation and reviews of the evidence, however,

¹ Child Measurement Programme for Wales 2015/16. Available at: <http://www.wales.nhs.uk/sitesplus/documents/888/12518%20PHW%20CMP%20Report%20%28Eng%29.pdf> [Accessed 12 Sep. 2017].

² Active, Start Active Stay. "A report on physical activity for health from the four home countries' Chief Medical Officers." *The Department of Health* (2011).

³ British Heart Foundation. Physical activity statistics 2015. Available at: <https://www.bhf.org.uk/publications/statistics/physical-activity-statistics-2015> [Accessed 12 Sep. 2017].

⁴ Tyler R, Mannello M, Mattingley R, Roberts C, Sage R, Taylor SR, Ward M, Williams S, Stratton G. Results From Wales' 2016 Report Card on Physical Activity for Children and Youth: Is Wales Turning the Tide on Children's Inactivity?. *Journal of physical activity and health*. 2016 Nov; 13(11 Suppl 2):S330-6.

⁵ Gluckman PD and Hanson MA. The conceptual basis for the developmental origins of health and disease. In: *Developmental origins of health and disease*; Cambridge University Press; 2006. p. 33-50

⁶ Commission on Ending Childhood Obesity. Report of the Commission on Ending Childhood Obesity. World Health Organization, Geneva; 2016 <http://www.who.int/end-childhood-obesity/en/> [Accessed 12 Sep. 2017].

it is not alluded to in the UK government's childhood obesity action plan⁷. The ECHO report recommends that while developmental factors change both the biology and behaviour of individuals from before birth and through infancy (leading to a higher or lower risk of developing obesity), it is essential to tackle both the environmental factors and three critical time periods in the life-course - preconception and pregnancy; infancy and early childhood; and older childhood and adolescence.

3. Barriers to increasing physical activity in children and adolescents

The levels of physical activity in children are influenced by multiple factors including physiological, psychological, sociocultural and environmental determinants. In addition, regular physical activity is also beneficial for mental health, bone health and improved sleep in children and young people. Factors shown to be associated with low levels of physical activity in children include parental overweight, unhealthy diet, no access to programs/facilities, and reduced time spent outdoors⁸. Additional factors linked to adolescent physical activity include being sedentary after school and on weekends, low support from parents and/or others (peers, teachers), and lack of opportunities to exercise. Environmental factors such as urban planning and design can reduce the levels of physical activity in children and young people due to intermediary factors such as concern regarding safety and lack of opportunities for active travel⁶. Factors shaping barriers to physical activity in different age groups within the range of 5-18 years show great disparity, and this is why a 'one size fits all' approach tends to fail. Hard-to-reach groups that require particular attention include overweight/obese children, children with disabilities, children from deprived backgrounds and young girls. Recognising these differences and tailoring interventions based on context and age group is key to using the life course approach to bring about changes in health behaviours. The rates of childhood obesity and overweight in Wales is significantly higher in areas with increased deprivation, however data suggesting a gradient in physical activity levels based on socioeconomic levels in children has been inconsistent. A review of 76 studies of inequalities of obesity in children has shown that obesity prevention/management interventions did not increase inequalities⁹. There is evidence supporting the effectiveness of school based programmes, interventions to empower communities and environmental interventions in decreasing obesity in more deprived areas. The interventions helped reduce the prevalence of obesity-related outcomes among low socioeconomic groups, or they closed the socioeconomic gap, with no studies suggesting a negative impact on increasing the gap in obesity related outcomes.

4. Physical activity guidelines and how we benchmark physical fitness in children

Physical activity, exercise and physical fitness are not synonymous terms. Poorly defined, or inconsistent use of terminology within physical activity guidelines for children and young people may promote misunderstanding among the target population that can hamper their ability to achieve the desired aims. Health-related physical fitness denotes fitness pertaining

⁷ HM Government. Childhood obesity: a plan for action. August 2016.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/546588/Childhood_obesity_2016_2_a_cc.pdf. [Accessed 12 Sep. 2017].

⁸ Sallis JF, Prochaska JJ, Taylor WC. A review of correlates of physical activity of children and adolescents. *Medicine & science in sports & exercise*. 2000 May 1; 32(5):963-75.

⁹ Bambra C, Hillier F, Cairns J, Kasim A, Moore H, Summerbell C. How effective are interventions at reducing socioeconomic inequalities in obesity among children and adults? Two systematic reviews. *Public health research*.. 2015 Feb 1;3(1).

to health promotion and disease prevention¹⁰. It is accepted to be a multidimensional construct yet there is no global consensus on the specific components that define it, although there is agreement that the inclusion of measures of body composition and cardiorespiratory fitness are important. A number of tests have been designed to assess the physical fitness of children and adolescents including, but not limited to, the European Physical Fitness Test Battery [Eurofit]¹¹ (Europe; age-range: 6-18 y), Fitnessgram¹² (USA; age-range: >5 y) and the Assessing Levels of Physical Activity [Alpha]¹³ Health-related fitness test battery (Europe; age-range: 13-17 y). Fitness testing in youth is still a contentious issue with many believing that such tests are outdated and meaningless with respect to providing useful data, or in promoting children's physical fitness, physical activity, motivation or knowledge and understanding¹⁴. However, if conducted in the right way, and with appropriate expectations surrounding their use (i.e., concerning measurement error, etc.), it may be argued that they can provide a snapshot of the 'current state of affairs' and act as a baseline against which future measurements can be compared, and they may play some role in supporting active lifestyles¹⁵. It is important to benchmark the current health-related physical fitness levels of children in order to assess the effectiveness of any Public Health initiative, or school- or community-based intervention. Unlike laboratory testing, field-based assessments of physical fitness are relatively easy to administer, require minimal equipment, and offer an effective, low-cost means of evaluating and monitoring the physical fitness levels of individuals and populations at large.

5. Role of school based physical activity interventions in improving physical activity related outcomes

- A multitude of interventions exist, based in settings such as schools, community centres, primary care, and at home, that have aimed to increase physical activity levels, achieve the current guidelines for physical activity and use exercise to prevent obesity in children and adolescents. Programmes to incorporate play-based activities over structured physical activity programmes to improve uptake and sustainability have been supported and recommended by *Every child Wales*, and some have been implemented in Wales such as the 'Food and Fun' programme¹⁶.
- School-based physical activity interventions have been effective in increasing the duration of physical activity from five to 45 min more per day, reducing time spent watching television from five to 60 min less per day, and increasing physical fitness (maximal oxygen uptake or aerobic capacity)¹⁷. Studies also suggest that children exposed to such interventions in school

¹⁰ Ferguson B. ACSM's Guidelines for Exercise Testing and Prescription 9th Ed. 2014. The Journal of the Canadian Chiropractic Association. 2014 Sep; 58(3):328.

¹¹ Adam, C., Klissouras, V., Ravazzolo, M., Renson, R., Tuxworth, W. (1988) *Eurofit: European Test of Physical Fitness*. Rome, Italy: Council of Europe, Committee for the Development of Sport.

¹² Welk GJ, Meredith MD. Fitnessgram/Activitygram reference guide. Dallas, TX: The Cooper Institute. 2008; 3.

¹³ Ruiz, Jonatan R., et al. "Field-based fitness assessment in young people: the ALPHA health-related fitness test battery for children and adolescents." *British journal of sports medicine* (2010): bjsports75341.

¹⁴ Keating XD. The current often implemented fitness tests in physical education programs: Problems and future directions. *Quest*. 2003 May 1; 55(2):141-60.

¹⁵ Cale L, Harris J, Chen MH. More than 10 years after "The horse is dead: Surely it must be time to "dismount?!" *Paediatric Exercise Science*. 2007 May; 19(2):115-31.

¹⁶ Welsh Local Government Association. Food and fun Programme Available at <http://wlga.wales/food-and-fun> [Accessed 12 Sep. 2017].

¹⁷ Dobbins M, De Corby K, Robeson P, Husson H, Tirilis D. School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6-18. *Cochrane database syst rev*. 2009 Jan 21;1(1).

were almost three times more likely to engage in moderate to vigorous physical activity (MVPA) during the school day than those not exposed. These interventions ranged from simple educational strategies including printed material, to those incorporating behaviour change techniques. Multi-component interventions that also focus on improving diets, achieving a healthy BMI, and increasing physical activity levels have shown promise. Long term interventions (>12 months) are beneficial in achieving a healthier Body Mass Index (BMI)¹⁸, however, only a few studies have evaluated long term effects.

- Other novel methods include involving young people and children in understanding the pathophysiology of diseases by engaging with science, such as the LifeLab intervention¹⁹ in Southampton, UK. Guided by researchers and teachers, adolescents are empowered to make healthy lifestyle choices by understanding the science behind the health messages and recognising for themselves the consequences of health behaviours at a young age. Early LifeLab²⁰ is an educational intervention for primary schools that aims to support children in making healthy choices about nutrition, levels of physical activity, sedentary time and sleep. Physical literacy programmes, such as the Dragon Challenge²¹, should continue to be developed for differing age-groups and be more widely integrated into school systems to evaluate and monitor progression.

6. Challenges and gaps in evidence measuring and evaluating existing programmes and interventions

Studies evaluating physical activity programmes have utilised objective and/ or subjective outcome measures relating to physical activity levels, physical fitness levels, sedentary time, body composition and anthropometric measures, as well as physiological measures (e.g., blood pressure), depending upon the studies' aim. Adiposity measurement using body fat percentage as an outcome is now widely recognised to be superior to BMI and body weight. While BMI is a crude measure that may underestimate the risk of chronic disease, it is easier to measure in population based studies where using advanced technologies may not be feasible. There is also a need for good quality data, collected routinely for different age groups within 5-18 year olds, considering the influences of growth, puberty and other factors at play during this period. Emerging evidence suggests measurements such as waist-to-height ratio may provide useful insights in younger populations, but more work is needed to develop reference ranges. As there are currently no large scale studies where physical activity or sedentary time have been measured objectively among children and young people in Wales⁴, this should be considered a priority. Accelerometry is arguably the most valid and objective field-based measure, yet the use of age-appropriate physical activity questionnaires may provide a low-cost, easily-administered means of gaining a population-wide insight into current physical activity levels. Physical fitness testing may only imply the relative success of physical activity promotion strategies, and unlike physical fitness, physical activity monitoring

¹⁸ Mei H, Xiong Y, Xie S, Guo S, Li Y, Guo B, Zhang J. The impact of long-term school-based physical activity interventions on body mass index of primary school children—a meta-analysis of randomized controlled trials. *BMC public health*. 2016 Mar 1; 16(1):205.

¹⁹ Woods-Townsend K, Bagust L, Barker M, Christodoulou A, Davey H, Godfrey K, Grace M, Griffiths J, Hanson M, Inskip H. Engaging teenagers in improving their health behaviours and increasing their interest in science (Evaluation of LifeLab Southampton): study protocol for a cluster randomized controlled trial. *Trials*. 2015 Aug 21; 16(1):372.

²⁰ Public Policy, University of Southampton. Early LifeLab: A plan for action. Available at <https://www.southampton.ac.uk/publicpolicy/what-we-do/with-whom-we-work/current-projects/earlylifelab.page> [Accessed 12 Sep. 2017].

²¹ Stratton G, Foweather, L, Rotchell J, English J, Hughes H (2015). Dragon Challenge V1.0 Manual. Sport Wales

is unaffected by genetic and maturational differences in individuals that may affect the overall interpretation of the results.

7. Recommendations

- There is no strong evidence supporting the notion that physical activity decline begins in adolescence, and in fact, studies have shown that the decline in PA levels begin as early as age seven years²². Efforts to promote physical activity at a health policy level, and in research, should therefore begin before adolescence for both boys and girls.
- There is a clear need for more long-term interventions and repeated follow-up assessments with robust data collection, using relevant and appropriate measures to track compliance and change in lifestyle. Nationally implemented measurement programmes may offer a useful means to obtain measurements of body composition (e.g., the CMP for Wales), physical fitness, and physical activity that could be used to monitor progression, and inform the design, delivery and evaluation of targeted interventions.
- The efficacy of multi-component interventions suggests that the aim of physical activity-based interventions should not only be to increase exercise or PA levels, but also to achieve a sustainable healthy lifestyle that includes maintaining a healthy BMI, achieving optimum nutrition, improving health literacy, and reducing sedentary and screen time. While it is difficult to determine which specific component/s within interventions help to achieve improvement, strategies that have shown potential have included: the provision of physical activity, body image and healthy eating education within the school curriculum; increasing sessions for physical activity throughout the school week; provision of capacity building activities for school staff; parental involvement; and encouraging reduction of screen time at home. If fitness tests are to have a role in schools, clear guidance, support, and training for teachers must be provided.
- It is important to recognise that physical fitness testing alone will not improve levels of physical activity, and that physical activity promotion strategies should be employed in conjunction with fitness testing. More time should be spent promoting physical literacy: in equipping young people with the awareness, knowledge and understanding, and promoting the characteristics, attributes and behaviours of healthy active living through their involvement in purposeful activities. For fitness testing to really prove its worth, it should be embedded within a supportive learning environment, as a component of an educational setting which promotes physical literacy and inclusivity. Explanation of the relevance of each fitness component and the ways to improve individually are of paramount importance to ensuring the meaningfulness of these assessments, and to promoting a positive attitude towards the testing procedures and physical activity as a whole.
- The life course approach and recommendations of the ECHO report provides a great opportunity for the Welsh Government to demonstrate leadership by committing to preventing childhood obesity – a holistic opportunity that was missed in the UK action plan. It must be recognised that focusing solely on physical activity or diet in isolation will not be sufficient, and the message provided to people should include achieving optimum health and fitness as key components.

²² Farooq MA, Parkinson KN, Adamson AJ, Pearce MS, Reilly JK, Hughes AR, Janssen X, Basterfield L, Reilly JJ. Timing of the decline in physical activity in childhood and adolescence: Gateshead Millennium Cohort Study. *Br J Sports Med.* 2017 Feb 4: bjsports-2016.

Submission to the inquiry into physical activity of children and young people

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What do we know about physical activity levels in children in Wales? How robust is the data on this issue?

1. The School Health Research Network (SHRN) collects data biennially on physical activity levels in secondary school aged children. SHRN is a partnership between Welsh Government, Public Health Wales, Cancer Research UK and Cardiff University. It aims to improve young people's health and wellbeing by (i) providing robust health and wellbeing data for school, regional and national stakeholders; (ii) working with policy-makers and practitioners from health, education and social care to co-produce high quality, school based health and wellbeing research for Wales; and (iii) helping schools, and those who support schools, to understand health research evidence and how it can be used in schools. Schools serving secondary school aged students in Wales make up the Network's membership, which currently stands at 99% of eligible maintained schools.

2. Every two years SHRN member schools undertake a Student Health and Wellbeing Survey and complete a School Environment Questionnaire. The student survey is based on the World Health Organization's (WHO) international Health Behaviour in School-aged Children Survey (HBSC), which Wales has participated in since the 1980s and is now delivered through the SHRN infrastructure. In 2015 the student survey included approximately 35,000 11-16 year olds from 87 schools. A school environment questionnaire was completed in 100 schools. Both the schools and the students within them were representative of all schools and of all 11-16 year olds in Wales respectively. Currently 192 schools have registered to take part in the Student Health and Wellbeing Survey in 2017/18, so the estimated student sample for 2017 is 90 - 100,000.

3. In 2015 a number of measures relevant to this Inquiry were included in the Student Health and Wellbeing Survey:

- a. Number of days in the past 7 days on which the student was moderate-to-vigorously physically active (MVPA) for at least 60 minutes per day
- b. Frequency of engaging in vigorous physical activity (VPA) outside of school hours
- c. Time spent in a typical week in the last 6 months in sports or clubs that involve physical activity, both in school and out of school

- d. Usual activity during the school lunch break
- e. Use of a mode of active travel to school
- f. Hours spent in sedentary screen time per day on weekdays outside of school

4. All of the above measures, bar c and d, were also included in the 2013 HBSC survey. This also collected hours per week spent in VPA, active travel from school and journey time, and weekend sedentary screen time.

5. Government Social Research publish data from the Welsh 2013 HBSC survey. We are actively seeking funding to analyse the above measures from the 2015 Student Health and Wellbeing Survey and suggest that supporting analysis of this valuable resource should be a Government priority.

6. Measures relevant to this Inquiry included in the 2017 Student Health and Wellbeing Survey are:

- a. Number of days in the past 7 days on which the student was moderate-to-vigorously physically active for at least 60 minutes per day
- b. Frequency of engaging in VPA outside of school hours
- c. Frequency of engaging in VPA in the last summer holidays
- d. Participation in sports or clubs that involve physical activity, both in school and out of school
- e. Use of a mode of active travel to and from school
- f. Journey time to school
- g. Hours spent sitting per day on weekdays and at weekends, outside of school

This data will be available in Spring 2018.

7. All of the measures are self-reported. Most of the measures come from the HBSC survey which details their reliability and validity. The MVPA measure has been validated in accelerometer studies and undergone test-retest reliability studies; it has subsequently been recommended as a brief surveillance measure with reasonable validity and moderate reliability. The VPA frequency measure has been found to be reliable in various international studies; it has also been validated against fitness criterion measures, but not against an objective measure of physical activity. An important point to note is that the MVPA measure has been used in the HBSC survey since 2001/2002 and the VPA measure since 1997/1998, so data on these variables is available for Wales across a 15-20 year period. Whilst the self-reported nature of the measures can be criticised, this nationally representative, long-term data on trends in young people's physical activity levels is highly informative and will continue to be built on through the Student Health and Wellbeing Survey.

8. The School Environment Questionnaire (SEQ) collects information on

school policies and practices pertaining to health and wellbeing, including physical activity. In 2015 these included:

- a. Hours of timetabled physical education (PE)
- b. Availability of extracurricular PE
- c. Facilities available for physical activity
- d. Number of Sport Wales Ambassadors
- e. Promotion of active travel
- f. Presence of partnerships to promote and maintain physical activity
- g. Lunch break length
- h. School prioritisation of health.

9. Combining SEQ data with student survey data enables investigation of school level influences on physical activity. SHRN's partnership with Welsh Government enabled analysis of physical activity data from the 2013 HBSC survey and SEQ. This investigated predictors of physical activity in 11-16 year olds and considered gender, ethnicity, affluence, active travel and school characteristics such as lunch break length. Both a summary of the key findings (9a) and the full paper (9b) are available:

- a. http://www.shrn.org.uk/wp-content/uploads/2016/09/Morgan_Predictors-of-PA_final.pdf
- b. <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-016-3213-8>

10. Other cross-sectional analyses have investigated whether school- and family-level affluence have independent and combined influences on physical activity. These found that students from more affluent families were more likely to meet the physical activity target of 60 minutes of MVPA per day. They also found that family and school affluence (measured by percentage of students entitled to free school meals (FSM)) interacted, suggesting that the difference in physical activity levels between students from more and less affluent homes is greater in more affluent schools (those with low levels of FSM entitlement), i.e. that income-related inequalities in physical activity are wider in more affluent schools.

- a. <http://onlinelibrary.wiley.com/doi/10.1002/berj.3265/full>
- b. <http://onlinelibrary.wiley.com/doi/10.1111/josh.12242/full>

11. The 2017/18 Student Health and Wellbeing Survey is piloting collecting identifying information from students to enable their data to be used for data linkage and longitudinal research. Establishing a longitudinal cohort within SHRN offers a means to track student-level changes in physical activity through adolescence and identify student- and school-level factors that influence increases and decreases in physical activity. Data linkage research, where Student Health and Wellbeing Survey data would be linked to routinely collected data, offers the means to analyse current and longer term health outcomes related to physical activity in adolescence and to investigate

the relationship between physical activity and academic attainment.

Barriers to increasing the levels of physical activity among children in Wales, and examples of good practice in achieving increases in physical activity, and in engagement with hard to reach groups, within Wales, the UK and internationally.

12. The WHO suggests that ‘role models’ could provide a mechanism for inspiring young girls to become active with the availability of community links to ensure activity levels are sustainable. Last year a pilot project (CHARMING), aiming to identify active role models for young girls (aged 9-11 years) involved two purposively sampled primary schools within Wales, one with a high proportion of children from a BME background (87% of children) and the other a high proportion of children eligible for free-school meals (e.g. 20-30%+). The study identified that 29% of girls were unsure of- or did not have a role model who inspired them to be physically active. Gathering data on facilitators to being active within the community, the study found that; the types of sports on offer, opportunities to be active with friends and having more free time were the greatest facilitators to help girls become more active. This study has completed its initial stages and is now seeking further funding to develop an active role model programme in Wales. More information can be found here: <http://decipher.uk.net/wp-content/uploads/2017/09/CHARMING-Report.pdf>

13. Our study found that the provision of structured sport and physical activity opportunities for girls (aged 9-11) in these communities was limited. Many of the local teams and clubs did not provide sessions for girls aged 9-11. One of the most challenging aspects of the project was identifying local opportunities that the girls could be signposted towards, with many resources containing outdated contact details.

14. We also draw the Inquiry’s attention to the ‘Sport, Physical activity and Eating behaviour: Environmental Determinants in Young people’ (SPEEDY) cohort study in England. This study started in 2007 with over 2000 9-10 year olds and has collected both longitudinal and qualitative data on barriers to and determinants of physical activity in young people. <http://www.cedar.iph.cam.ac.uk/research/directory/speedy/>

Measurement, evaluation and effectiveness of the Welsh Government’s programmes and schemes aimed at promoting physical activity of children.

15. Through its biennial surveys SHRN offers Welsh Government a cost-effective data infrastructure that can underpin policy and programme monitoring and evaluation. Although it has not yet been used for this in relation to physical activity, baseline data is already in place for future evaluations of population-based approaches to increasing physical activity in

young people. Randomised controlled trials to evaluate new physical activity policies could also be undertaken at low cost using the SHRN infrastructure, as different areas of the country could be randomly allocated to implement a new policy. It could then be evaluated before a decision regarding national roll-out is taken.

16. The large and representative sample of students within SHRN also means that the impact of programmes and schemes on sub-groups within the population can be evaluated. For example, programmes that seek to increase physical activity in young people from minority ethnic backgrounds can be evaluated. Negative impacts of programmes, such as inadvertently widening inequalities in physical activity, can also be assessed.

The role of schools, parents and peers in encouraging physical activity, and the role of Sport Wales, NHS Wales and Public Health Wales in improving levels of physical activity.

17. Schools have an important role in promoting physical activity, both within the curriculum and through extra-curricular activities and active travel. WHO's Health Promoting School (HPS) framework, a settings based approach which recognises the influence of the school environment (policies, practices, physical environment and culture) on student health, has been adopted globally, including Wales. Nearly all maintained schools in Wales are members of the Welsh Network of Healthy School Schemes, which supports them to improve student and staff physical, mental and social health by acting in four areas: curriculum, ethos, physical environment and community relations. A recent Cochrane Library systematic review found some evidence of a positive impact of the HPS approach on physical activity and fitness.

18. In the primary school context, findings from our focus groups with preadolescent girls in the CHARMING project indicated that primarily girls' role models consisted of family members including parents, siblings, cousins and aunties. When asked specifically about role models for physical activity, a number of them also identified family members. Teacher interviews highlighted some of the challenges schools face in providing sport and physical activity for young girls. These included a lack of school resources, such as the availability of teaching staff and facilities. The costs associated with organising and running sporting and physical activity clubs within schools were also seen as a barrier. Teachers also discussed the limited links with local sports clubs and the difficulties they faced accessing external providers to deliver active sessions in their school. Community partners involved in the research also discussed the limited links between schools and clubs and that there were no current resources to raise awareness of physical activity and sport in the community.

19. Schools can be key innovators of approaches to increasing physical

activity in young people and through its surveys and school engagement activities SHRN offers a system to identify and capture promising secondary school-level innovations, explore why they work in a particular school context and evaluate their potential for wider adoption.

Inquiry into physical activity of children and young people

Response from: **Sport Wales**

Background

1. Sport Wales is the national organisation responsible for the development of sport in Wales – from community participation to elite success. We are committed to developing an active, healthy and prosperous Wales, where every citizen has the opportunity to participate in sport and physical recreation, and reach their potential, irrespective of background and circumstance.
2. Working with partner agencies, on a national and local level, we aim to increase the frequency of participation in sporting activity, as well as improving elite performance. We take a broad view of sport, from traditional sports, such as swimming and netball to activities such as Zumba and dance. We are also the main adviser on sporting matters to the Welsh Government and are responsible for distributing funds from the National Lottery to sport in Wales.

Overview

3. Sport Wales welcomes the opportunity to respond to this important consultation by the Health, Social Care and Sport Committee on physical activity of children and young people.
4. The benefits of regular sport and physical activity for physical health is well established. For example, there is [clear evidence that physical activity and sport can improve physical and mental well-being](#) (external link). There is also some [a fairly well-explored evidence base linking physical activity and sport to individual development outcomes like educational attainment and employability](#) (external link).
5. Sport Wales has systematically planned and invested in young people's sports participation for the last 10 years. This includes programmes such as [Dragon Multi-skills and Sport](#), and [5x60](#) (external links), and through broader investment in local authorities and National Governing Bodies of Sport to develop extra-curricular and community opportunities. Over this time, we have seen a significant increase in young people's participation in sport in Wales. The numbers of children and young people who participate in sport on three or more occasions a week is up from just 27% in 2011, to 40% in 2013, and 48% in 2015.
6. In 2012 Sport Wales launched the Calls for Action programme to increase the participation of people from groups that were less likely to participate in sport. Many of the projects we have invested in have specifically targeted children and young people from groups that had low levels of participation in sport. The programme is being [independently evaluated over three years in real time, with ongoing feedback and learning](#) (external link).

What do we know about physical activity levels in children in Wales? How robust is the data on this issue?

7. Physical activity includes a broad spectrum of activities. This includes sport, but also includes activities such as active travel (cycling to school), play, and gardening. We adopt the [Council of Europe's definition of sport](#), which is *all forms of physical activity which, through casual or organised participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels*.
8. As a leading authority on sport, producer of Official Statistics and creator of insight, Sport Wales collects and interprets data related to sports participation in Wales. Our main source of data and insight is derived from our world-leading [School Sport Survey](#) (external link). **The statistics from the School Sport Survey are classed by the UK Statistics Authority as Official Statistics This means that they are produced in accordance with the [Code of Practice for Official Statistics](#) (external link). This sets out necessary principles and practices to produce statistics that are trustworthy, high quality, and of public value.**
9. Through our latest survey in 2015, 116,000 children and young people from 1,000 different schools across Wales had their say on participation in sport. What we know from this is:

- a. 48% of pupils across Years 3 to 11 in Wales take part in organised sporting activity outside of curriculum time on three or more occasions per week
 - b. There is little difference in sports participation on 3 or more occasions a week: 49% of primary pupils and 48% of secondary pupils
 - c. There are still significant gaps in sports participation according to pupils' age, ethnicity, disability, and relative deprivation. Higher levels of sports participation were recorded for: pupils in Years 5 and 6; mixed race and black/black British pupils; pupils from the least deprived schools; and pupils in secondary schools who were Welsh speakers
 - d. Pupils who are very confident in trying new activities without worrying are twice as likely to participate in sport on three or more occasions a week.
10. Further information, statistics, infographics, and an animation on the results can be found [here](#) (external link). It is difficult to benchmark this data with the rest of the UK or internationally as this kind of detailed data is not routinely collected from children and young people outside Wales.
 11. Through our [experimental research with the National Centre for Social Research and production of a good practice guide to asking children and young people about sport and physical activity](#) (external link), we know that when asked about physical activity, children struggle with the term, there are issues with the recall of information, and older children more likely to give socially acceptable responses. Children, were clearer on what was meant by sport and due to the relative regular nature of sporting activities, are less likely to have recall issues.
 12. We routinely evaluate and look to improve the trustworthiness, quality, and public value of our statistics. This includes cognitively testing questions for understanding, and reviewing our methodologies. This year we reviewed the School Sport Survey seeking feedback from a range of partners, including schools, local authorities, National Governing Bodies of Sport, Estyn. While it was acknowledged that the Survey produces valuable data for a range of stakeholders, the review also revealed several areas for development. These include: improving the child-friendliness of the survey; increasing school buy-in; rethinking the timing of the survey fieldwork and dissemination of survey findings; maximising usage of the data; and exploring the potential for data linkage. We now have a programme of planned improvements.
 13. What we have across the public sector and Higher Education sector is, however, different ways of collecting data and measuring levels of participation. This inconsistency isn't in the public interest. Some work has commenced looking at this, but a better co-ordinated and more systematic approach would be welcomed.

Differences in gender-based attitudes towards, and opportunities for, participation in physical activity in Wales

14. The data from our [2015 School Sport Survey](#) (external link) suggests that at all stages (primary and secondary) and in all environments (sport during PE, school clubs and sport outside of school) males enjoy sport more than females. The difference in gender-based enjoyment of sport is greater in secondary school than in primary school.
15. Similarly, male pupils are more likely to express confidence when they are trying new activities – with 85% being 'very confident' or 'confident' compared with 73% of females.
16. We know from our [qualitative research exploring sports participation amongst 14-21-year olds](#) (external link) that both girls and boys drop out of sport during secondary school and for very similar reasons. The available quantitative research data indicates that the drop-off is more pronounced for girls than boys, but that the issue exists for both genders.
17. Although there is an upward trend in sports participation, there is still an 8-percentage point gap in participation rates between males and females. We have a programme of investment addressing the inequalities that exist. This includes [Our Squad](#) (external link), an initiative aimed at inspiring, empowering and encouraging more women and girls in Wales to get active and give sport a go.
18. Following the publication of [Facilities for Future Generations](#) (external link), we have recently commissioned an audit of facilities across Wales. Facilities play an important role in the health of the nation. It is crucial that we and local authorities have an accurate and consistent view of opened, closed, and planned facility developments

across Wales to identify where the gaps in provision are and ensure all those living in Wales have equal opportunities to get active.

The extent to which Welsh Government policies are aimed at whole populations and/or particular groups, and what impact that approach has on addressing health inequalities.

19. Historically Sport Wales has taken a differentiated and targeted investment approach to increasing participation in sport amongst different groups. These approaches have reflected the duties placed on Sport Wales by various equalities legislation and ultimately The Equality Act 2010.
20. The National Assembly for Wales has relatively recently passed two ground-breaking pieces of legislation that have created a new framework for how we focus our work. These Acts are the Well-being of Future Generations (Wales) Act 2015 and the Social Services and Well-being (Wales) Act 2014. Both of these laws, and the general public policy direction of Welsh Government, now require public bodies, including Sport Wales, to address issues relating to differential participation in sport amongst particular groups, and what impact this may have on health (and other) inequalities. Sport Wales has welcomed this policy approach because it will enable a co-ordinated response from public services to address issues of differential levels of physical activity amongst children and young people.

Barriers to increasing the levels of physical activity among children in Wales, and examples of good practice in achieving increases in physical activity, and in engagement with hard to reach groups, within Wales, the UK and internationally.

21. Over the past four years we have undertaken and commissioned [a wide range of research](#) (external link) in order to advance our understanding of the sport and physical recreation landscape in Wales. The breadth and depth of data gleaned from this research is vast, and collectively it has provided us with a wealth of insight and intelligence. There are some clear themes which emerge. These themes fall into five inter-related areas which taken together explain why engagement in sport continues to vary so significantly across our population – [Elements of Engagement](#) (external link). These are:
 - a. **Motivation:** an inner desire or drive. ‘The energy for action’
 - b. **Confidence:** a belief in one’s ability to attain a high level of performance or to achieve desired goals, and a sense of certainty that doing so will be worthwhile
 - c. **Awareness:** knowing when, where and how to take advantage of relevant opportunities
 - d. **Opportunity and Resources:** opportunities are available and easily accessed
 - e. **The Experience:** the experience is worthwhile. It reinforces one’s motivation & confidence and increases the likelihood of continued engagement
22. The Elements of Engagement focuses on understanding people. It is a framework through which we are understanding and developing our insight, and in an applied way, developing a suite of resources to help increase or sustain engagement in sport and physical recreation.
23. We have many examples of good practice. Two significant programmes of investment that have seen noteworthy change are the Physical Literacy Programme for Schools and the Calls for Action programme (as outlined in paragraph 6). Our evaluation of the Physical Literacy Programme for Schools reported improvements in young people’s physical, social and emotional development, as well as their engagement, attendance and behaviour.
24. As part of our continuous improvement, we have been developing a revised model of investing in and delivering community sport in Wales.

Physical activity guidelines and how we benchmark physical fitness in children.

25. The Chief Medical Officers’ guidelines for physical activity are grounded in robust scientific evidence. They outline [differentiated advice for different population groups](#) (external link) (Under 5s, Under 5s who are capable of walking, Children and Young People - 5-18yrs, Adults – 19-64yrs, Older Adults – 65+yrs). At a practical level, the nuance of the guidelines is often missed.

26. Physical fitness in children is important. We would advocate focusing on physical literacy. [Physical literacy](#) (external link) is the motivation, confidence, physical competency, knowledge and understanding to value and take responsibility for engagement in physical activities for life. This is an area of work we have focused on in recent years; developing the [Physical Literacy Journey](#) and supporting materials ([animations](#) and [resources](#)). The Physical Literacy Journey was developed to support future curriculum planning and delivery, and has been aligned to Successful Futures in terms of a progressive continuum (journey) with steps along the way to track progress. It has been populated with examples of the 'how' and the 'what' in terms of physical literacy in action, and supports the Health and Well-being Area of Learning and Experience, but also holistically across the curriculum. This, together, with a range of academics working in this field, Wales is leading the way in the UK in this field.

Measurement, evaluation and effectiveness of the Welsh Government's programmes and schemes aimed at promoting physical activity of children.

27. Measurement, evaluation and effectiveness of our programmes and schemes is central to our work.
28. Over time and using insight, we have made adjustments to the Free Swimming Programme, shifting its emphasis to 'learn to swim' provision and ensuring that every child in Wales can swim by the age of 11. A formal review of the Welsh Government's Free Swimming programmes will begin soon. The review will determine whether the programmes have achieved their stated outcomes for children, young people and older adults, and whether they can achieve a greater impact on sport participation levels. The findings and recommendations from this review will help shape and steer the sector's strategy and proposals for community sport in Wales.
29. The [PE and School Sport programme](#) (external link) and subsequently the [Physical Literacy Programme for Schools](#) (external link) were funded by Welsh Government and managed by Sport Wales for 15 years to help raise standards in Physical Education. During the time, Key Stage 3 PE attainment levels increased from 61% in 2001 to 91% in 2015. An evaluation of the Physical Literacy Programme for Schools can be found [here](#) (external link). This recent [video reel](#) (external link) demonstrates the benefits and achievements of both programmes, as well as the broader Sport Wales school-based work.
30. As we said in paragraph 6, our Calls for Action programme is being [independently evaluated over three years in real time, with ongoing feedback and learning](#) (external link). Beyond the headline numbers, the aim is to assess what impacts are being achieved and how, the character and degree of innovation, and the lessons for Sport Wales as well as for front line practice. Key learning and topics from the evaluation include: participation; value for money; governance and partnership; timing and pace; ways of working; and structural change.

Value for money of Welsh Government spending to promote exercise in children.

31. Value for money, or our preferred term, return on investment, is an area that needs considerable development. This is something that has been identified within the Ministerial Review of Sport Wales and is a broader issue across the public sector. Value for money is one of the themes that we're exploring within our evaluation of Calls for Action and are testing more broadly. Whilst there is merit in looking at this at a micro-scale or at an organisational level, there is much more value in having a consistent approach across the public sector with the Well-being of Future Generations Act as a framework.

The role of schools, parents and peers in encouraging physical activity, and the role of Sport Wales, NHS Wales and Public Health Wales in improving levels of physical activity.

32. We want children from all backgrounds to have the best start in life, that everyone will have the opportunity to reach their full potential and lead a healthy, prosperous and fulfilling life. This is everyone's role. It is a cross-governmental agenda and not limited to Sport Wales, NHS Wales and Public Health Wales. It would benefit from a better coordinated and integrated approach.
33. Confident, positive and resilient parenting is fundamental to preparing children for life. Parents have by far the greatest influence on their children. We know from our insight that parents' involvement in sport is positively associated with their children's physical activity levels. Sport Wales is looking forward to working with a wide range of partners, including the education and health sectors, to review the way we maximise our collective efforts and resources to enable more children – regardless of their background – to be active through sport.

Through our work on the Physical Literacy Journey, we have provided [resources to help support parents](#) (external link) enable their children to be physically literate.

34. [The Young Ambassador programme](#) (external link) was introduced to Wales in 2009. Young Ambassadors are tasked with increasing awareness and opportunities to improve the health, wellbeing and physical activity levels of other young people, whilst also developing themselves to be the best that they can be through learning valuable leadership skills such as communication, influencing and team work, that are fundamental in supporting them on becoming confident, resilient and employable young people. [The programme has an incredible reach](#) (external link); there are 3,283 Young Ambassadors across Wales and the programme runs in 57% of all primary schools and 91% of secondary schools. The power of the young person's voice has inspired more sports organisations to offer opportunities for young people to become decision-makers through forming school councils, youth panels and becoming board members. Further information on their impact can be found [here](#) (external link). There is a need to harness the Young Ambassador movement with a greater importance placed on self-determination and peer support when developing and delivering opportunities to be physically active.
35. Schools are a critical partner; they provide the spaces and opportunities to thrive. We know from our action research on physical literacy in schools that:
 - a. Professional development of teachers is needed to ensure that pupils can develop their physical literacy and thrive;
 - b. Early childhood motor development and early movement, needs developmentally appropriate activities, and a programme of professional development to enable this significantly impacts pupils' physical development;
 - c. Quality Physical Education needs to build on Foundation Phase to support and develop physical literacy, this requires an understanding of pedagogy in physical holistic learning;
 - d. Professional development and change needs to be strategic so that it has buy in from Local Education Authorities and Head teachers in order to develop whole school and community approaches.
36. For NHS Wales and Public Health Wales, we acknowledge the work being done on reducing Adverse Childhood Experiences, the Welsh Network of Healthy Schools Schemes, social prescribing, and 'making every contact count'. As we have said, there is scope for all parties to take a better coordinated and integrated approach.
37. Similarly, children and young people's physical activity needs to be an integral part of public policy, for example:
 - a. A key feature of the new curriculum and monitored by Estyn;
 - b. A part of Initial Teacher Training to ensure all teachers in Wales have the skills and confidence to facilitate physical literacy;
 - c. Part of the planning system to create the right local physical environment that provides easy access to local physical activity spaces;
 - d. A key consideration for public funded programmes (e.g. the importance of providing modern, inspirational school sports facilities and the need to ensure 21st Century School Programme is set up to achieve this);
 - e. A requirement of all child care provision;
 - f. Further development of safe routes to schools.
38. Developments in digital technologies have brought about a huge step change in how people live their lives. A lot of young people have only ever known life in the 'digital age'. Unlocking the full potential of the digital and data revolution will be fundamental in transforming how people engage with sport and physical activity.

For further information, please contact:

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Agenda Item 4

Inquiry into physical activity of children and young people



Disability Sport Wales Response to the Health, Social Care and Sport Committee call for evidence

Fiona Reid
CEO, Disability Sport Wales



Disability Sport Wales is committed to the sector vision for sport by creating an inclusive Wales in which *every disabled person is hooked on sport* and offered real choice as to where, when and how often they are physically active, including the playing or competing in sport, and in doing this build a *Nation of (disabled) champions*. DSW believe that this approach will help to secure the sector's goal of 'more people, more active, more often'.

Disability Sport Wales are very aware that this is not achievable through our actions and vision alone, the key to success will be bringing existing, as well as new partners on the journey; and in influencing and supporting inclusive cultural change across the sector. DSW's approach is to challenge and support partners and the wider sporting landscape to accept and embrace inclusion, and in so doing provide even greater levels of activity for disabled children, young people and adults.

1. What do we know about physical activity levels in children in Wales? How robust is the data on this issue?

- 1.1. Activity levels of disabled children within Wales is lower than that of their non-disabled peers. The School Sport Surveyⁱ suggested in 2015 that 40% of disabled children are hooked on sport (compared to 49% of non-disabled children) (and reflected a 9% increase from 31% of disabled children hooked on sport in 2013). The nature of this data is continuously strengthening, and DSW worked closely with Sport Wales prior to the 2015 survey to ensure that a version was available in Easy Read format to better engage disabled children within mainstream education, but also to capture the experiences of disabled people within SEN schools, units and Specialist Teaching Facilities (STFs). There is still further work to be done, and the percentage representation of disabled children and young people within the data is inconsistent across localities, and low.
- 1.2. DSW KPIs (2016) identify that there are 1.475 million participation opportunities available to disabled people in Wales; with 749,151 of these available to disabled children and young people under the age of 18. DSW collect KPIs at 6-month intervals on an annual basis and the data is cross-referenced and validated.
- 1.3. DSW are aware through their partnership with Betsi Cadwaladr University Health Board (BCUHB)¹ that there remains **reduced** opportunity for disabled children and young people to participate and be included within their Physical Education lessons at secondary school; and there is frequent provision of health interventions (OT and physio sessions) provided to disabled children in primary schools in place of their PE sessionsⁱⁱ.
- 1.4. The DSW insport Series Event in Cardiff (supported by Arriva Trains Wales)ⁱⁱⁱ attracted more than 850 children and young people this year, with a large proportion of them never having experience physical activity (including sport) before. This is a showcase event for DSW highlighting the latent demand, but also reflects the pervasive lack (albeit decreasing) of inclusive opportunity in other events delivered within the sector; or that the data collected from other events does not allow engagement by disabled people to be monitored and/or evaluated.

¹ This was a Calls for Action-funded partnership which intended to create a pathway between health and physical activity (including sport) for disabled people. It focused on the creation of a signposting process from health intervention in to a physical activity (including sport) opportunity^{iv}. A Social Return on Investment study identified that for every £1 invested in work to signpost disabled people into physical activity resulted in a social return of £124^v.

1.5. There is a definite need to support the understanding of the sector around physical activity for disabled children and young people in schools (engaged in intra- and extra-curricular activities) through the provision of robust data, captured through inclusive methodologies.

2. Differences in gender-based attitudes towards, and opportunities for, participation in physical activity in Wales.

2.1. DSW are aware through their 2016 KPIs of the following figure for U18's:

	Membership	Participation Opportunities
Male	7662	481,322
Female	4322	280,903
Total	12,284	749,151

2.2. Sixty-two percent of DSW's U18 membership identify as male, and 38% identify as female; with the males occupying 64% of the participation opportunities provided. Members are identified as individuals who attend inclusive (throughout the spectrum of provision (open, modified, parallel, and specific)) clubs and/or sessions within their local community. It is likely that there is a greater gap between the males and females who have an impairment than is seen within male and female populations of people without impairment; one explanation could be that there are greater numbers of disabled males than disabled females.

2.3. Further research is needed into the differences in gender-based attitudes towards participation in physical activity for disabled children, young people and adults.

3. The extent to which Welsh Government policies are aimed at whole populations and/or particular groups, and what impact that approach has on addressing health inequalities.

3.1. As outlined in the Welsh Sports Association response to this call for evidence, there is a need for greater clarity around the remit of sport to help deliver the wider physical activity agenda.

3.2. There has been an increasing focus on equity, equality, diversity and inclusion within WG policies, which has undoubtedly supported an approach to delivery which has been more reflective of particular groups. However, there is arguably more work to be done, specifically around education and the position and provision of PE within the curriculum and it being inclusive of disabled children and young people; as well as greater challenge to support the UK CMO Guidelines (2011)⁴ for the achievement of 60 minutes a day of physical activity for *disabled* children and young people aged 5 – 18.

3.3. Deliverers of physical activity (including sport) to children and young people often do not provide opportunity for disabled children and young people to engage with their activity, or it is added-on after provision has been made available to non-disabled children and young people first. This means that there is a lag in provision, and consequently physical activity levels, to disabled people; the risk of this continuing to happen is that the health inequality gap continues to grow.

Welsh Government policy needs to explicitly challenge deliverers and partners to include specific groups, and to take positive action which will then have a resultant impact on health inequalities.

4. Barriers to increasing the levels of physical activity among children in Wales, and examples of good practice in achieving increases in physical activity, and in engagement with hard to reach groups, within Wales, the UK and internationally.

- 4.1. There are many barriers to children in Wales which prevent increasing levels of physical activity (which are highlighted in the WSA response to this call for evidence) but these are further enhanced and extended when the child or young person has an impairment (and further again if that child lives in poverty or social deprivation). Additional barriers to disabled children and young people include: limited availability of opportunity and choice; lack of knowledge and awareness; accessibility; perceptions of providers and parent linked to functional ability; social isolation; transport; cost; and appropriate 'care' support^{vi}.
- 4.2. DSW have led on innovative and successful examples of good practice to enhance the levels of physical activity in disabled children and young people; but the common denominator for all centre around: raising awareness of the impact (insport series eventsⁱⁱⁱ); identifying what inclusion is (insport NGB, insport Development and insport Club^{viii}); links to support, knowledge, and skills (Sainsbury's Active Kids for All^{ix}) and enhancing confidence to deliver (DSW/BCUHB HDSP^{iv}); and how to be creative in provision and format of that provision (Get Out Get Active (GOGA)^x).
- 4.3. The intersectionality associated with being a disabled child and also a member of a/other group(s) who share protected characteristics is not understood by the physical activity (including sport) sector and it is therefore essential that further insight is supported to appropriately address the "complex and multifactorial"^{vi} barriers.

5. Physical activity guidelines and how we benchmark physical fitness in children.

- 5.1. These need to be clearly challenging of providers to ensure that they are considering appropriate models and guidelines which are appropriate to the benchmarking of the physical fitness of disabled children and well as non-disabled children.
- 5.2. Physical Literacy, and physical competencies work has been carried out by Sport Wales in partnership with Swansea University^{vii} on the Dragon Challenge (and accompanying Dragon Tracker app) for non-disabled children and young people at yr6. This is intended as a measure of physical competency rather than physical fitness, but if adopted will provide insight into the physical competencies of (non-disabled) children in Wales. More recently DSW have worked to ensure that the provision is also accessible to disabled children, and whilst there is more work to do, this area of work forms an important function in understanding some of the benefits of physical activity.
- 5.3. It is essential that any work done within this area is inclusive of disabled children and young people to assess their levels of physical fitness, and to develop guidelines for physical activity, to ensure that there is not a fitness or measurement tool gap. Currently, within the vast majority knowledge and insight linked to guidelines and benchmarks, there is an assumption that the model identified for non-disabled individuals will also translate to disabled individuals. This assumption potentially means that essential considerations which would drive best practice and

high-quality engagement and provision are missed, and diverse communities (in this case disabled people) are still over-looked and not effectively provided for without additional support from agencies such as DSW.

6. Measurement, evaluation and effectiveness of the Welsh Government's programmes and schemes aimed at promoting physical activity of children.

- 6.1. Often programmes which are delivered through partner and funding agencies do not capture sufficient information regarding disabled children, young people and adults; therefore, measurements and evaluations with specific regard to disabled children and young people's experiences of physical activity (including sport) and its promotion are not readily available.
- 6.2. DSW would suggest that there is a greater demand from Welsh Government on partners to ensure that programmes aimed at promoting physical activity (including sport) for children, young people (and adults) are a) inclusive, and b) capture appropriate data which enables effective measurement and evaluation of disabled children and young people's experiences.
- 6.3. The Health Disability Sport Partnership between DSW and BCUHB is an example of a disability-focused initiative which intends to measure, evaluate and establish a pathway through which disabled children, young people and adults are encouraged to be(come) physically active. The training and resources which have been developed to support the pathway have resulted in 58% of the signposting being to children and young people; linked to this there have been notable reductions in bullying, increased involvement in and provision of opportunity for inclusion in PE, heightened levels of self-worth and identify, and creation of stronger friendship groups within the stories captured from children and young people^{xi}. This partnership is now delivered sustainably through BCUHB with partnership engagement from DSW².

7. Value for money of Welsh Government spending to promote exercise in children.

- 7.1. It is difficult to identify whether there is value for money in Welsh Government spending to promote increased physical activity (and exercise) to disabled children and young people without robust monitoring and evaluation data (see 6.1).
- 7.2. The Welsh Government and Lottery funding invested in DSW through Sport Wales is used effectively and strategically to deliver broad-ranging and high-quality impacts; but for genuine success, inclusive delivery must be delivered, monitored and evaluated by all those who also have an integral role to play in increasing, and advocating for physical activity to disabled and non-disabled children and young people. It is essential that this includes Education, Health (NHS and Public Health Wales, and more widely than BCUHB and North Wales), and Social Care; as well as Housing Departments and Associations, Town Planning, Facilities providers, Youth Services, Play Wales, Sustrans, Public Services, etc.

² There is a proposal for National delivery within the other Health Boards across Wales, which has been delivered to the DOTHS, and the Cabinet Secretary for Health, Well-being and Sport. All monitoring and evaluation is centred around the experiences of disabled people.

8. The role of schools, parents and peers in encouraging physical activity, and the role of Sport Wales, NHS Wales and Public Health Wales in improving levels of physical activity.

- 8.1. Schools, parents, families and peers are essential to facilitating physical activity to disabled children^{vi}. Therefore, it is essential that curricular and extra-curricular provision is inclusive of the disabled children and young people in the school; that community options for disabled children and young people reflect choice and assure confidence to parents that their child will be safe, welcomed and have a great experience; and that children and young people have the chance to participate with their friends. Without these elements “children with disability [*sic*] are potentially missing out on a range of opportunities to develop the skills they require to be physically active”^{vi}.
- 8.2. Sport Wales, NHS Wales, Public Health Wales all have an essential role to play in the provision of inclusive physical activity (including sport) and Disability Sport Wales are a key partner to the successful and coordinated delivery of this. However, there needs to be clear direction from Welsh Government regarding the specific areas of the physical activity continuum that SW (and the National Governing Bodies for sport in Wales), NHS Wales, and PHW will lead on and be responsible for. Similarly, resultant definitions of ‘sport’ need to be flexible and genuinely reflect formats which are inclusive of disabled people from participation through to elite competition.

9. Conclusions

- 9.1. DSW support the comments highlighted within the WSA response to the call for evidence, provided on behalf of National Governing Bodies for Sport in Wales
- 9.2. DSW would strongly call attention to the fact that there remains a significant disparity in the availability of insight and knowledge around physical activity for disabled children and young people (as well as adults), and that non-disabled paradigms are applied without consideration of the implications.
- 9.3. Investment should only be made in programmes which emphasise a genuinely inclusive (meaningful involvement) approach to the provision of physical activity (including sport).
- 9.4. It is imperative, in order to increase the physical activity levels of disabled children and young people, that:
 - 9.4.1. they are **not** excluded from their school PE sessions, extra-curricular clubs, and play-times;
 - 9.4.2. the physical literacy journey (and assessment of this) is inclusive and reflective of disabled children and featured within the (new) school curriculum for Wales;
 - 9.4.3. work continues to take place which ensures inclusive community provision is appropriately supported, advocated, championed, measured and evaluated;
 - 9.4.4. physical activity (including sport) is proactively encouraged by health professionals who are knowledgeable or aware of the sign-posts into appropriate activity locally; and
 - 9.4.5. definitions used of sport by Welsh Government and the Sector are reflective of the formats which include disabled people.

References

- i <http://sportwales.org.uk/research--policy/surveys-and-statistics/school-sport-survey.aspx>
- ii [http://whiasu.publichealthnetwork.cymru/files/5114/9554/8836/Health Impact Assessment- Health Disability Sport Partnership.pdf](http://whiasu.publichealthnetwork.cymru/files/5114/9554/8836/Health_Impact_Assessment-Health_Disability_Sport_Partnership.pdf)
- iii <http://www.childreninwales.org.uk/item/insport-series/>
- iv <http://www.wales.nhs.uk/sitesplus/861/page/72926>
- v <http://gov.wales/docs/phhs/publications/170403infographicen.pdf>
- vi <https://bmcpediatr.biomedcentral.com/articles/10.1186/s12887-016-0544-7>
- vii http://www.swansea.ac.uk/sports-science/research/documents/files/Dragon%20Challenge%20Manual_English.pdf
- viii <http://www.disabilitysportwales.com/resources/>
- ix <http://inclusivepe.org.uk/>
- x <http://www.getoutgetactive.co.uk/>
- xi <http://www.wales.nhs.uk/sitesplus/861/page/74101>



Comisiynydd Plant Cymru Children's Commissioner for Wales

Ymateb i Ymgynghoriad / Consultation Response

Date / Dyddiad: 19th February 2018

Subject / Pwnc: **National Assembly for Wales - Health, Social Care and Sport Committee: Inquiry into the physical activity of children and young people**

Background information about the Children's Commissioner for Wales

The Children's Commissioner for Wales is an independent children's rights institution established in 2001. The Commissioner's principal aim is to safeguard and promote the rights and welfare of children. In exercising their functions, the Commissioner must have regard to the United Nations Convention on the Rights of the Child (UNCRC). The Commissioner's remit covers all areas of the devolved powers of the National Assembly for Wales insofar as they affect children's rights and welfare.

The UNCRC is an international human rights treaty that applies to all children and young people up to the age of 18. It is the most widely ratified international human rights instrument and gives children and young people a wide range of civil, political, economic, social and cultural rights which State Parties to the Convention are expected to implement. In 2004, the Welsh Government adopted the UNCRC as the basis of all policy making for children and young people and in 2011, the National Assembly for Wales passed the Rights of Children and Young Persons (Wales) Measure, which places a duty on Welsh Ministers, in exercising their functions, to have 'due regard' to the UNCRC.

This response is not confidential.

I welcome that this inquiry provides for a specific focus on the physical activity of children and young people. I also positively note that the Committee intends for the information to be considered during the development of the National Obesity Strategy. The Inquiry offers an opportunity to set out Wales's expectations to help ensure the best possible start for our children and young people and actively equip them, parents/carers, professionals and the public with knowledge, tools, support, opportunities and services to reach their full potential and lead as healthy and physically active lives as possible. Ultimately, working towards and achieving this would uphold children's rights and it is my intention to focus primarily on this aspect within my response. In this response I make the following key points.

1. Physical activity and obesity have a clear relationship with Children's Rights. It is therefore crucial that in taking this agenda forward the Welsh Government and public services consider their obligations under the United Nations Convention on the Rights of the Child (UNCRC) and Rights of Children and Young Persons (Wales) Measure 2011.
2. Access to play, rest, leisure, recreational activities, cultural life and the arts is a right in itself (Article 31, UNCRC) and should be clearly acknowledged and associated with this agenda.
3. Based on the information readily available I am concerned about the apparent social inequalities in participation in sport and in obesity levels.
4. It is imperative that children and young people in Wales are given opportunities to meaningfully engage in this agenda, from gathering evidence in respect of children and young people's current experiences of engaging in physical activity, to designing and evaluating programmes, services and activities. Ultimately, this is a right that all children and young people regardless of the topic under Article 12 of the UNCRC.
5. I identify some promising programmes in place in Wales, but would emphasise the need for clear evidence of effectiveness, to include outcome measures and qualitative evidence from children themselves.

Children's Rights and the UNCRC

This Inquiry presents the opportunity to frame the discussions around children and young people's rights to health (Article 24) and survival (Article 6). Furthermore the United Nations Convention on the Rights of the Child (UNCRC) can be used as a framework to ensure that all rights of children and young people are acknowledged and opportunities for realising them are maximised. An approach to physical activity seen through a Children's Rights

lens supports a child or young person’s right to rest, leisure, play, recreational activities, cultural life and the arts (Article 31), to associate with others and join clubs (Article 15) and to fulfil their potential (Articles 6 and 29).

I have seen the importance of these rights through spending time with children at numerous engagements, such as school visits, out of school activities and the annual Conwy play day, and through consultation work that my office undertook with young people in summer 2017. This work gathered the views of over 200 children and young people from diverse backgrounds about their opportunities to take part in activities under Article 31 of the UNCRC, that is, to play and take part in sport and leisure activities, the arts, culture and heritage. Some children and young people talked about using their leisure time for specific “sports” but many more told us how they were involved, to varying degrees, in physical activity. Examples included; walking, swimming, cycling, playing outside and going to the park. The latter was particularly referenced across of a range of ages. In 2016 the UN Committee on the Rights of the Child acknowledged Wales’ specific policy commitments to play and children’s rights, yet they also made a number of recommendations for further development, including to “provide children, including those with disabilities and children in marginalized and disadvantaged situations, with safe, accessible, inclusive and smoking-free spaces for play and socialization and public transport to access such spaces.”¹ As Play Wales outlined in their written submission for this Inquiry “although there are limited longitudinal studies assessing the longer-term impact of play for health, there is evidence (and it is widely accepted) that playing is central to children’s physical, mental, social and emotional health and wellbeing (Lester and Russell, 2008).”² Therefore whilst this Inquiry is focused on physical activity there is a link and opportunity here which should not go unrecognised in relation to play, including play sufficiency legislation. [General Comment 17](#) was written by the UN Committee 2013 following concerns that there was “poor recognition given by States to the rights contained in article 31”³ and I would recommend this document as it explores in greater detail the relationships and expectations on state parties in relation to a child’s right to rest, leisure, play, recreational activities, cultural life and the arts which fits with this agenda.

Five to seven year olds told me as part of my Beth Nesa consultation, which involved over 7000 children and young people in Wales, that play was important to them - their biggest priority was “more places to play.”⁴ “Better places

¹ [Committee on the Rights of the Child Concluding observations on the fifth periodic report of the United Kingdom of Great Britain and Northern Ireland](#), 2016, page 20.

² [Inquiry into physical activity of children and young people](#), Play Wales, September 2017, page 1.

³ [General comment No. 17 \(2013\) on the right of the child to rest, leisure, play, recreational activities, cultural life and the arts \(art. 31\)*](#), Committee on the Rights of the Child, April 2013, page 3.

⁴ [Children’s Commissioner for Wales Beth Nesa? What Next? The findings](#), Children’s Commissioner for Wales Office, 2016, page 15.

for young people to spend time in their local area”⁵ was ranked 6th priority for 7-11 year olds and 3rd for 11-18 year olds.

In relation to the development of the national obesity strategy, I would also like to highlight that the UN Committee not only identified obesity as a concern,⁶ but made a specific link to nutrition. The conclusions drawn by the World Health Organisation’s 2017 report⁷ in respect of obesity and related behaviours, also identifies nutrition/dietary behaviour as a key factor along with physical activity and sedentary behaviour. The report is informed by the [Health Behaviour in School-aged Children \(HBSC\) Survey](#) which involves children and young people from across Europe and North America, including Wales. I will revisit some of these aspects again within this response.

Whilst highlighting these particular rights, the realisation of one right should not have a detrimental impact on the achievement of others. For example, the right to play, leisure and recreational activities also includes the right “rest” and emphasises that play is freely chosen. The views of a 9 year old who was involved in our consultation work over the summer perhaps show what children can experience if their rights aren’t equally considered despite the best intentions of the adults around them, *“3 days I have activities after school but I do get the rest of the week off.”*⁸

Children’s Rights commitment and approach

On a regional and local level Public Services Boards, Local Authorities and Health Boards are some of the key vehicles through which current and future policies and programmes are delivered, from active travel to the forthcoming obesity strategy. Last year my office published [The Right Way](#), a guide to how public services can adopt a children’s rights approach which I am promoting across Wales, in order to ensure that children’s policies and services are planned and delivered in-line with a children’s rights framework. In addition, the Future Generations Commissioner and I will shortly be launching a toolkit which will assist public bodies in meeting their obligations to children and young people under our respective sets of legislation and measuring their progress.

Physical Activity Levels

As the Children’s Commissioner for Wales it is my aspiration that every child and young person in Wales has an equal chance to fulfil their potential. Information in respect of physical activity in Wales reported by both parents and

⁵ [Children’s Commissioner for Wales Beth Nesa? What Next? The findings](#), Children’s Commissioner for Wales Office, 2016, page 15.

⁶ [Committee on the Rights of the Child Concluding observations on the fifth periodic report of the United Kingdom of Great Britain and Northern Ireland](#), 2016, page 16.

⁷ [Adolescent obesity and related behaviours: trends and inequalities in the WHO European Region](#), 2002–2014, WHO, 2017, pages 44-47, accessed 23.01.2018.

⁸ Young person –Article 31 Survey: Children and Young Person’s Survey, Children’s Commissioner for Wales Office, Summer 2017.

children similarly indicate that around half of children may be active: “51% of children (age 3-17) were reported by parents/carers as being active for at least an hour seven days a week”⁹. A similar picture is presented in respect of school aged children being “hooked on sport”¹⁰ with 48% of secondary school children and 49% of primary school stating that they take part three or more times a week. With 29% of children in the same survey reporting no frequent sporting activity, it can be seen that there are wide differences in the everyday experiences of children in relation to physical activity across the population.

Furthermore, there are indicators that income inequalities are having an impact. The School Sports Survey (Sport Wales) identifies “there is around a ten percentage point difference between pupils who are hooked on sport in FSM1 compared with FSM4 (Free School Meals Quartile).”¹¹

The Child Measurement Programme for Wales 2015/16 reported that a quarter of reception aged children in Wales (26.2%) are overweight or obese¹² and that once again those from the most deprived backgrounds appear to be amongst those significantly affected. I note that in their [State of Child Health 2017 Recommendations for Wales Report](#) the Royal College of Paediatrics and Child Health have recommended that “Public Health Wales should expand the Child Measurement Plan for Wales to measure children after birth, before school and in adolescence”¹³ having stated that “Data on obesity in older children is not collected in Wales and this must be rectified.”¹⁴

Children and Young People’s engagement

In order to have a picture of the physical activity of children and young people in Wales and create meaningful policies, programmes and opportunities I believe that their right to give their views and have them taken into account must be upheld (Article 12). In Wales, quantitative data is gathered from children and young people through a number of surveys including the Health Behaviour in School Age Children Survey, the Millennium Cohort Study and the School Sport Wales Survey. The nature of the surveys have enabled a degree of comprehensive data specific to Wales to be established, which can also in most cases be compared to children’s lives in the rest of the UK and internationally. This survey data is important to understand patterns and behaviours. However, it is also important to understand the context for why there are certain patterns of behaviour, such as gender differences in sports participation, and why some promising programmes may fail to achieve the results hoped for. This type of

⁹ [National Survey for Wales 2016-17: Child Health – Lifestyle](#), statistical bulletin, Welsh Government, Sept 2017, page 6.

¹⁰ “the number of occasions per week that a pupil takes part in either extracurricular school based activity or community based club activity” [State of the Nation Report, Sport Wales](#), 2015, page 5.

¹¹ [State of the Nation Report, Sport Wales](#), 2015, page 6.

¹² [National Child Measurement Programme for Wales 2015/16](#)¹²

¹³ [State of Child Health 2017 Recommendations for Wales Report](#), Royal College of Paediatrics’, page 8.

¹⁴ [State of Child Health 2017 Recommendations for Wales Report](#), Royal College of Paediatrics’, page 8.

understanding may be gained through a mixture of qualitative research and activities which enable children to participate in discussion and decision-making forums. The 2015 School Sport Survey identified that children and young people were “Nine times more likely to enjoy P.E. 'a lot' if their ideas about school sport are always listened to.”¹⁵ The redevelopment of the Curriculum in Wales presents an opportunity to co-design this aspect with children and young people. Similar involvement of children and young people in co-designing community resources for physical activities is also likely to achieve more successful policies and provision. This way of working fits with a children’s rights approach and also the ways of working under the Wellbeing of Future Generations (Wales) Act 2015.

My aspiration as Children’s Commissioner for Wales is for every child to have an equal life chance to enable them to fulfil their potential. Robust data will provide evidence of the progress Wales is making towards this. Children and young people should have a key role in being involved in policy development, providing feedback and holding public services to account for their progress in this area. At a recent Government round table discussion with researchers involved in the national surveys mentioned above, I was encouraged to note a recent development of plans by some of the survey providers to enable children and young people to engage with their schools on development plans arising from the results of surveys.

Barriers to participation

Views that over 200 children and young people provided to my office in summer 2017 give an indication that attitudes and barriers to utilising play and free time and taking part in activities (including physical activity) are affected by a number of factors including, but not exclusive to, gender. Aspects affecting children and young people’s participation include where children and young people live, socio economic circumstances – more specifically child poverty, health (including disabilities), family and social networks, and religion and culture. It is for this very reason that the participation of all children and young people in developing policies and strategies, as stated above, is so important.

Through interactive workshops held during 2017, my office was able to gather qualitative data from children and young people of both sexes including those with disabilities, different socio economic backgrounds, Welsh speakers, young carers and those who are care experienced. Despite their different social contexts there were a number of similarities in terms of the barriers to enjoying free time or engaging in activities. These were lack of time (particularly due to school work and exams), transport issues, availability and accessibility, cost of activities and equipment as well as lack of money, knowing ‘what is on’ and confidence. Links with confidence were self-image, family support,

¹⁵ [School Sport Survey webpage](#), Sport Wales, accessed 30/01/2018.

whether the activity was perceived by their peers as 'social suicide' (although this was usually associated with arts based activities) and some concerns about bullying.

Although there were commonalities across different social groups, as may be expected, there were some differences. Many girls talked about unequal access to football and rugby. A number of Muslim girls talked about the need for more female only activities and sports coaches to enable them to uphold their religious practices whilst participating in activities they enjoyed. However, accessing football was also raised as a barrier for boys, particularly in terms of elitism, and members of the LGBT community ambassadors group talked about the barrier of gender specific teams. Children and young people with disabilities raised particular issues about wheelchair access to play and leisure facilities and the suitability of changing areas. They also talked about support to get to places but not wanting adults to be overly protective; "people annoy me by interfering" as one disabled young person described it. Care leavers spoke about barriers in terms of local authority rules in respect of permission to participate as well as health issues like anxiety, depression and back problems. Meanwhile, for young carers, their caring role and money were two significant barriers. When asked – "What sports and leisure do you do?" one young carer replied, "Walking to the shops to buy things for my mum". There have also been concerns expressed about cuts to facilities in relation to the current era of austerity in public spending. My office provides an Investigation and Advice service and recent contacts have included concerns from adults and a group of children about outdoor and indoor provision being closed, changes to costs and degree of community consultation.

Physical Environment

Several children and young people and their parents also identified concerns related to undertaking activities outside; traffic, poorly maintained areas, not being old enough to play outside, drugs paraphernalia, gangs and safety in general. In 2015, with the support of Sustrans, my office published a report about School Journeys¹⁶ based on the views of almost 1000 children aged 5 – 11. When asked what they liked about walking, cycling or scooting to school "Children's comments on this issue most commonly fell into four categories: health benefits, having fun and playing, enjoying the environment, spending time with friends, family and other people."¹⁷ The added benefits from active travel were striking. More negatively, "Road safety was mentioned as a barrier by a lot of children, including cars, speeding and safe ways to cross roads. In addition, a lack of paths to walk along busy roads and of cycle paths in good condition were mentioned by many children. Other barriers were the weather

¹⁶ [School Journey's Children's Commissioner for Wales, Special Mission, School Journeys Survey, Findings and Report](#), Children's Commissioner for Wales, 2015.

¹⁷ [School Journey's Children's Commissioner for Wales, Special Mission, School Journeys Survey, Findings and Report](#), page 7.

and lack of provision of cycle racks at school.”¹⁸ This upholds that the physical environment provides a backdrop to play and utilisation of free time which promotes physical activity. I believe that as a population we need to build activity into everyday routines, such as travel to school, and that habit needs to start at a young age. For the period of 2014/2015 the National Survey reported that the proportion of Primary School children who typically walked to school was 49%, the same as the year before. In 2016/2017 this figure dropped 7 percentage points to 42%. Cycling dropped from 3% to 2% and finally to 1% in 2016/2017. The figures reported over these periods in respect of secondary school children have remained relatively static within 3 percentage points of each other but paint an even bleaker overall picture in terms of active travel engagement for children in this age group – for 2016/2017 it was 34%. It is important that this data continues to be collected in a manner which enables the figures to be compared over time to help build a long term picture of children and young people’s active travel in Wales.

Older children involved in discussions in summer 2017 continued to express concerns, similar to those expressed in 2015 through the Beth Nesa consultation, regarding the availability of age appropriate activities in their local area. *“16 year olds, for example, are seen as too old to play in the park but too young to go to the pub. There should be more outdoor adventure and indoor social spaces that are young people friendly and not child friendly.”*¹⁹ It is important to remember that all children and young people have the right to play and leisure (including physical activity) and that whilst setting the scene for this in the early years is important, the environment should provide opportunities into adolescence and beyond.

The role of technology

As part of the interactive summer workshops all children and young people involved in discussions about how they spent their free time mentioned using technology from watching YouTube to talking with friends. This is perhaps not surprising given Ofcom’s [Children and Parents: Media Use and Attitudes Report](#) in November 2017 which states that “More 3-4, 5-7s and 8-11s are online than in 2016, with increases of more than ten percentage points for the youngest two age groups.”²⁰ Yet, when children and young people gave their views about what they missed out on, using technology was rarely mentioned. Instead they expressed wanting to engage in activities and experiences. Therefore, whilst technology may be an easily accessible option for many (but not all) this may not necessarily mean it would be their first choice. One young person identified Technology as a clear barrier and believed this widely affects children and young people *“The availability of entertainment. Whether it is YouTube, Xbox, Facebook, Netflix*

¹⁸ [School Journey’s Children’s Commissioner for Wales, Special Mission, School Journeys Survey, Findings and Report](#), page 6.

¹⁹ Young person - Member of Children’s Commissioner for Wales Community Ambassador group, Summer 2017.

²⁰ [Children and Parents: Media Use and Attitudes Report](#), Ofcom, November 2017, page 7.

or TV, there are far too many easily accessible sources of entertainment. These are all addictive and can limit the amount of physical exercise that young people do. Young people can often find time for homework because it needs to be done, but in my opinion, exercise is something that many people leave out."²¹ I note that the WHO report highlights sedentary behaviour as a contributory factor in relation to obesity. In their January 2018 publication in respect of children's screen time the British Psychological Society recommended that more robust studies were needed which can identify causality and that more qualitative methods, such as interviews, ethnography and participatory design, should be employed...."²²

Reducing Barriers

Without prompting, some children and young people we heard from in the summer offered solutions to the barriers they raised, including: More role models (particularly for girls), female coaches, social sporting opportunities and using money differently to run youth clubs over the summer. I will be publishing a spotlight report this year which will provide more details on the views of children and young people around access to play and leisure opportunities, and will ensure that this is shared with the Committee in order that it can contribute to this ongoing Inquiry.

As Commissioner I have had the privilege of visiting a number of promising programmes relevant to this agenda including Us Girls, Street Games, Food and Fun, Fit and Fed and several schools embracing the Daily Mile programme. I have seen children and young people enjoying activities from running and skipping to music as part of their daily mile to learning about how to cook healthy food. Many also told me how much they valued these activities.

However, the [Effectiveness of a childhood obesity prevention programme delivered through schools, targeting 6 and 7 year olds: cluster randomised controlled trial \(WAVES study\)](#) recently published in the British Medical Journal highlights my earlier point that effective evaluation of programmes to establish if they have achieved their intended outcomes is important. In this case, even with what appeared to be comprehensive social interventions, the programme did not deliver the intended outcome, which was to reduce childhood obesity. The authors conclude that the childhood obesity epidemic is unlikely to be addressed by school programmes alone "without wider support across multiple sectors and environments."²³

²¹ Young person - Member of Children's Commissioner for Wales Community Ambassador group, Summer 2017.

²² [Better evidence needed on appropriate screen time for children and young people](#), The British Psychological Society, 17th January 2018, accessed 02.02.2018.

²³ [Effectiveness of a childhood obesity prevention programme delivered through schools, targeting 6 and 7 year olds: cluster randomised controlled trial \(WAVES study\)](#), Adab Peymane, Pallan Miranda J, Lancashire Emma R, Hemming Karla, Frew Emma, Barrett Tim et al. BMJ 2018; 360 :k211, page 1, accessed 08/02/2018.

Submitted by:

A handwritten signature in black ink, appearing to read 'Sally Holland', written in a cursive style.

Professor Sally Holland

Children's Commissioner for Wales

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