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2021-04-13

## Sport and Physical Activity during the First 10 years of Life in Ireland and the UK

Kristy Howells

*School of Psychology and Life Sciences, Canterbury Christ Church University, Canterbury, United Kingdom*

Tara Coppinger

*Department of Sport, Leisure & Childhood Studies, Munster Technological University, Cork, Ireland,  
tara.coppinger@cit.ie*

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### Recommended Citation

T Coppinger & K Howells (2021). 'Physical activity and sport during the first 10 years of life in the UK and Ireland' in: R Bailey, J Agans, J Coté, A Daly-Smith, P Tomporowski (Eds.) Physical activity and Sport During the First Ten Years of Life. London: Routledge.

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## **Sport and Physical Activity during the First 10 years of Life in Ireland and the UK**

Kristy Howells and Tara Coppinger

### **Introduction**

This chapter considers the many similarities (but also differences) within the educational experiences of the young children in sport and physical activity (PA) in Ireland and the UK. For the school settings (primary school), teachers are required in both locations to have Bachelor degrees in primary education, and children start at a similar age (approximately 4-5 years), the length of school is approximately 5.5-6.5 hours per day, 5 days a week. Prior to this age, parents can opt to send their children to pre-school / nursery settings from approximately 2 years 10 months until they start school. The qualifications of those educating children in pre-school does vary, with those in the UK having to have achieved a minimum level 3 qualification, whilst in Ireland the minimum qualification is a level 5 (Howells and Säakslähti, 2019).

PA has, in both countries, had an increased focus on its value and importance within children's lives; a time of habit development. Public Health England (2014) reported that one in 6 deaths in the UK are due to lack of PA in adults, making it as dangerous as smoking. Until recently (2019), there was a gap in the sport and PA guidelines offered by the World Health Organisation (2019) for children aged 0 – 5; now there are focused recommendations for PA, sedentary behaviour and sleep for under 5's, as well as the new, updated PA guidelines for children and youth aged 5 – 17 years. These recently launched guidelines have been developed into national recommendations in Ireland and within the four home countries of the UK (England, Wales, Scotland and Northern Ireland).

The areas that will be focused on within Ireland and the UK, in this chapter include:

- The current policies and practices of sport and PA
  - The current PA and sport levels of children <10 years
  - The contribution of educational settings to sport and PA of children <10 years
- Other factors that influence sport and PA

### **Current policies and practices of sport and PA**

Healthy Ireland (Department of Health, 2019) is the national framework for action to improve the health and wellbeing of the people of Ireland. The National Physical Activity Plan (NPAP) (Department of Health and Children, Health Service Executive, 2009), is incorporated into one of 9 core policies and aims to create increased opportunities for people to be active in ways which fit into everyday lives and which suit individual needs, circumstances and interests. The national guidelines for 2 – 18-year olds are that all children are recommended to achieve 60 minutes of moderate to vigorous physical activity (MVPA) a day, as well as undertaking muscle strengthening, flexibility and bone strengthening exercises 3 times a week.

Although the NPAP states guidelines will be actioned on by 2018 (Department of Health, 2013), there remains no nationally endorsed guidelines for young children aged 0-6 years (at time of writing). This is despite evidence that specific PA guidelines for this age group are important (Skouteris et al., 2012).

Instead, recommendations for those aged <6 years are incorporated into the children and young people (2-18 years) guidelines. Although research exists for the benefits of MVPA for school-aged children (Poitras et al., 2016), definite evidence for those <5 years remains lacking (Skouteris et al., 2012; Pate et al., 2013). Endorsed guidelines, supported by policy makers, would support national surveillance and inevitably generate more research into this currently under-researched group in Ireland (Harrington et al. 2016). Aistear, the Early Childhood Curriculum Framework for children from birth to 6 years (NCCA, 2009), recommends PA and fundamental movement skills (FMS) through each of their four themes (Wellbeing, Identity and Belonging, Communicating, Exploring and Thinking), all through the encouragement of active play. For primary school going children (4-12 years), the National Curriculum assigns 60 minutes per week for Physical Education (PE) (National Council for Curriculum and Assessment (NCCA), 1999). As PE in a child's formative years influences their future PA patterns (Bailey et al., 2009) and given that some children may not be involved in any sport or other organised physical activities outside of school, PE may be the only structured form of PA in a child's week. PE should, therefore, be prioritised (Green, 2012). Yet, data suggests that Irish children only receive, on average, 46 minutes of PE each week (Woods et al., 2010), which is over an hour less than the global average (UNESCO, 2014) and the lowest of any European county (European Commission / EACEA/ Eurydice, 2013). The Irish Primary PE Association (IPPEA) continue to highlight this discrepancy and in their position statement, recommend a time allocation of 150 minutes per week for PE in Irish primary schools (IPPEA, 2017). To date, this has not been implemented.

The UK Chief Medical Officers (2011) offer guidelines for children aged 0 – 5 years for those who are walking and those who are not walking. They also link to the WHO recommendations (2010) for children aged 5 onwards, similar to Ireland's recommendations of 60 minutes of MVPA as well as 3 days a week for bone and muscle strengthening activities. The Department of Health also emphasise on trying to reduce sedentary time of children in their first ten years of life. The NHS (2018) continue this emphasis by warning against children under 5 being sedentary for long periods and suggest not being strapped into chairs or buggies for long periods of time and suggest a variety of activities to try and ensure young children are as active as possible.

Within the UK there are numerous government departments who have a responsibility for sport and PA within the lives of young children. Table 1 outlines the different departments and their roles linked to Physical Education, PA and school sport (developed from the DCMS / Strategy Units, 2002). These departments work in turn at all levels: local, regional and nationally. For example, the Department of Transport links together with the Countryside Alliance, the Walking for Health initiative and the British Heart Foundation when developing active transport for school policies and the ways in which young children can be supported in how they travel to and from school / educational settings.

Department	Role
Department of Culture, Media and Sport – (DCMS)	Department in charge of sport
Department of Health (DoH)	Focus on key health benefits to be gained through PA
Department for Education and Skills (DfES)	Department in charge of school sport and Physical Education, as well as life-long learning.
Office of the Deputy Prime Minister (ODPM)	Department in charge of local government funding and performance
Department for Transport (DfT)	Department given the importance of walking and cycling as physical activities
Home Office (HO)	Focus on using sport in crime prevention
Sport England (SE), Sport Wales, Sport Scotland, Sport Northern Ireland (SNI)	Agency responsible for grassroots
New Opportunities Fund (NOF)	Lottery distributor responsible for facilities development in schools

Table 1 UK Governmental Departments and Roles for promoting sport and PA.

### Current PA and sport levels of children

Irish data indicates that only 17% (13% girls; 23% boys) (Woods et al. 2018) of primary school children meet the national PA guidelines and, while objective data of the PA levels of children aged 0-6 years remains scarce (Harrington et al., 2016), the Growing up in Ireland (GUI) study (2013) highlight that less than half (42%) participate in active play each day. Furthermore, only 2 in 10 (22%) parents partake in some form of PA or sport with their children in this age bracket. Given that PA has already been identified to decline with age (Gavin et al., 2015), these results are stark, highlighting that traditional, spontaneous play is being removed from very young children’s lives and that this behaviour is continuing as these children age. This puts these children at a further disadvantage as inadequate mastery of fundamental movement skills (FMS) has already been identified in Irish children (Bolger et al., 2018). This could impact on both their capability and participation (Stodden et al., 2008), and remain with them as they transition through adolescence (Belton et al., 2016). Many children, however, do participate in either school (70%) or community (80%) sport at least once a week in Ireland (Woods et al., 2018). Given that 35% of primary school children who play sport 4+ times per week meet the guidelines compared to 10% of all other primary school children (Woods et al., 2018), it could be argued that organised sport still plays an important role in enabling children to meet PA guidelines.

Sport Ireland is the main body that governs sport in Ireland. It is an agency of the Department of Transport, Tourism and Sport and collaborates closely with the Minister for Transport, Tourism and Sport and the Minister of State for Tourism and Sport. The department’s goal in relation to sport is ‘to

contribute to a healthier and more active society by promoting sports participation and by supporting high performance and the provision of facilities" (Department of Transport, Tourism and Sport, 2019). It's most recent National Sports Policy sets out a vision for Irish sport up to 2027, along with 57 actions to transform Ireland's sporting landscape over the next decade. The Federation of Irish Sport is the representative organisation for the National Governing Bodies of Sport (NGB's) and Local Sports Partnerships (LSP) in Ireland. LSP's co-ordinate the development of sport at a local level in Ireland, with each of the 26 counties hosting a sports education and training hub.

UKactive (2018) reported that today's children are "the least active generation ever". Only one in four boys (23%) and one in five (20%) girls in England achieve the recommended 60 minutes of MVPA each day. They also report that children return to the start of the school year in September, less fit than when they finished school in July; this drop in fitness is most noticeable in poorer areas of the UK. These findings of limited PA link to previous reports from OFSTED (Office for Standards in Education, Children's Services and Skills) (2014) who identified a difference in children's PA levels and abilities. They reported that over one in eight settings within disadvantaged areas highlighted that children were arriving to the settings with poor and extremely low levels of physical development due to their lack of opportunities to be physically active. They found that these children from deprived areas were up to 12 months behind in physical development and could not complete or participate in activities such as riding a tricycle or a scooter as they did not have access to either of these prior to entering the settings. The children also had had no opportunities to learn how to throw, catch or kick.

### **The contribution of educational settings to sport and PA of young children**

Research from Sport Ireland and Sport Northern Ireland (CSPPA, 2018) identify that team games dominate Physical Education, with 93% of focus on games (soccer, Gaelic football, hurling, basketball). School and early educational settings are key settings and the focus of early physical learning in the UK and Ireland is very similar as places for children to learn to move and learn how their bodies move. They are places for children to learn through the medium of movement, to help them lead full active and healthy lives (CSPPA, 2018). Perhaps a wider non games based set of opportunities are needed to allow children to develop life-long, as well as life-wide, habits for participation in sport, PA and movement (Howells and Jess, 2019). Howells et al. (2017) suggest that it is important to develop physical curiosity within children's early movements and sport to allow children to continue to seek out opportunities to explore their own bodies and space. These educational settings are much more than places to simply provide exercising opportunities for every school, but "should encompass individual physical development, health and wellbeing" (Howells, 2011). They are places where children can form likes and dislikes (Howells, 2012) and can have specific benefits such as: "physical health; cognitive and academic development; mental health; crime reduction and reduction of truancy and disaffection" (Bailey, 2005). Biddle et al., (2011) also proposed that time spent outside is correlated with activity levels, but access and availability of opportunities to participate in PA may also be important.

Although not compulsory, Howells and Sääkslahti (2019) report there is the promotion of active play within Irish training programmes for early childhood, with resources for FMS and leaflets offered for parents to help support active play for 0 – 3 year olds. Within the early years' curriculum in England, there are 3 prime areas of learning, one of which is physical development, which involves providing opportunities for young children "to be active and interactive and to develop their coordination,

control and movement. Children are also helped to understand the importance of PA and to make healthy choices in relation to food" (DfE, 2017). Within the curriculum document, reference is made to the Chief Medical Officers (UK) published guidance on PA for those under 5s who are not yet walking, which encourages tummy time, (time spent on stomach rolling and playing on the floor), reaching and grasping for objects, as well as floor based and water based play to encourage motor skill development and social and emotional bond development. The benefits of movement are identified as developing motor skills, improving cognitive development, contributing to healthy weight, enhancing bone and muscular development and supporting learning and social skills. There is also reference to the PA guidelines for those under 5 who are able to walk, and recommendations are made for unstructured active play, movement that includes all the major muscle groups (legs, buttocks, arms, movement of the trunk from one place to another), energetic play (such as riding bikes, trikes and climbing) and energetic bouts of activity (such as running, chasing games, walking and skipping).

The learning area of physical development has 2 key areas 1) moving and handling in which "children show good control and coordination in large and small movements. They move confidently in a range of ways safely negotiating space. They handle equipment and tools effectively, including pencils for writing", (DfE, 2017). 2) health and self-care in which "children know the importance for good health of physical exercise and a healthy diet and talk about ways to keep healthy and safe, similar to Ireland's focus on physical and mental wellbeing. Physical development can be supported in variety of ways such as climbing, manipulative sand and water trays, leaving equipment out for free play (Cooper and Doherty, 2011). Alongside physical development within the school setting (for those aged 4 – 5 years) children also have formal Physical Education lessons. Those in other early years settings, (aged 0 – 4) do not normally have lessons on top of physical development sessions. Table 2 shows the key foci of Physical Education and Physical Development according to the age of children, school phase and setting.

School Phase (and Setting)	Age of children	Key foci
Early Years (Pre School, Nursery)	0 – 5	Co-ordination Control Confidence
Key Stage 1 (Primary School)	5 – 7	Competence Confidence Co-ordination Co-operation Undertaking challenge Swimming
Key Stage 2 (Primary School)	7 – 11	Competence Confidence Co-ordination Co-operation Undertaking challenge Communicating Collaborating Competing Swimming

Table 2 – Illustrates key foci of Physical Education and Physical Development in UK

### Other factors that influence sport and PA

There are multiple other factors that can influence sport and PA within Ireland and UK; both within the curricula as well as PA interventions within school. Within this section, Fundamental Movement Skills (FMS); Active miles initiatives; the use of competition and the impact of families will be discussed.

### FMS

Children need to develop the basic building blocks or FMS before expecting them to master the more advanced skills required for lifelong involvement in PA and sport (Gallahue and Ozmun, 2006). As FMS do not develop naturally over time (Clark, 2007), ensuring children have enough physically active opportunities to develop their FMS is important (Le Gear et al., 2012). Such refinement will allow children the opportunity to achieve a higher proficiency in FMS that will support PA participation as they age (Robinson et al., 2015). All children need time to focus on these early movements - running, jumping, throwing, catching, agility, balance and coordination in isolation first, then increasing

complexity as they achieve success, to allow them to consolidate their skills, with learning opportunities to link combinations of skills together (Howells et al., 2017).

Figuroa and An (2016) reviewed studies that investigated the relationship between PA and motor skill proficiency in pre-schoolers and although these varied by skill type, intensity and gender, a relationship existed in 6/7 of studies. The evidence as to whether or not PA participation influences FMS and vice-versa is limited but Stodden et al., (2008) believe that it is not until middle childhood (6-12 years) that this relationship truly manifests and that when it does, it is only FMS that influences PA and not the other way around. Perceived competence also plays a role, with children perceiving that they can execute a skill proficiently more likely to enjoy participating in activities that use that skill (Stodden and Goodway, 2007). A child with low perceived competence will result in a reduced likelihood of participation in PA as they progress through life (Lubans et al., 2011) and since pre-schoolers tend to have inflated perceptions of their motor competence (Stodden et al., 2008), it could be argued that mastery of FMS in the pre-school years is fundamental to lifelong participation in PA and sport.

The Early Years Foundation Stage in England (Department for Education, 2017) encourages physically active play and suggests practitioners adhere to the Chief Medical Officer's PA guidelines for the early years (Chief Medical Officers, 2011). FMS is also a named element of the Physical Education primary national curriculum (DfE, 2013), but no such similar regulations for ECCE settings exist to support FMS in Ireland. There are programmes such as: 'Active Play Every Day'; 'Kids Active'; 'Smart Start'; and 'Promoting Active Play in Early Years Settings' for educators to support and improve the PA of pre-schoolers but none of these are mandatory. The four themes of the Aistear Early Years Curriculum do not implicitly relate to FMS either but the framework does have learning goals that could be achieved through PA. "Gain more control of their bodily movements and co-ordination" within the Well-being theme and "clarify their thinking in making sense of spatial awareness, timing and space" within the Exploring and Thinking theme, could both be linked to the development of FMS. As PA has been closely linked to outdoor time (Larouche et al., 2017) and access to outdoor play within the early years is a mandatory policy for ECCE services (DCYA, 2016), outdoor time has the potential to increase young children's PA and hence, develop their FMS. Yet, early years practitioners receive limited training in the field of PA or FMS and weather and parental attitudes further hinder outdoor play delivery in preschool centres (Murphy, 2015). Specific training in FMS for practitioners and increased awareness and education to parents on the importance of outdoor time are therefore important factors to address in order to increase FMS and overall PA for pre-schoolers in Ireland.

### **Active miles**

Daily PA interventions have been recommended by the Department of Health and Social Care (DHSC) (2018) in the UK to help increase overall PA levels as part of the Childhood Obesity plan. In 2017 the first plan was introduced to recognise that obesity is a complex problem and the focus has been within schools in ensuring PA is a key part of the new healthy schools status rating scheme, in which schools have the opportunity to demonstrate what and how they are ensuring their pupils are having regular PA and making their pupils more physically active (DHSC, 2017). Within chapter 2 of the plan for action released in 2018, more specific guidance for how schools could achieve increased levels of PA was introduced. The recommendation within the plan (DHSC, 2018) was to "promote a national ambition for every primary school to adopt an active mile initiative such as the Daily Mile". Athletics Ireland, as



well as the Minister for Tourism and Sport, have been key at promoting The Daily Mile within all primary schools in Ireland and evaluation of the programme is in progress. The Secretary of State for Health and Social Care (DHSC, 2018) recommends such active mile initiatives as they can “improve the physical, social, and mental wellbeing of our children – regardless of age, ability or circumstances” (p.5). These benefits are also echoed by The Daily Mile Foundation (2019) who have also developed principles to help support schools adopt this initiative and encourage primary schools to take children outside for 15 minutes of self-paced running, jogging or walking each day, which is approximately the length of time needed to travel a mile. They do not restrict the children to having to walk, jog or run a mile, which indicates that some children will achieve this and others will not. Also the principles indicate that the daily mile does not need to be completed every day but 3 or more times a week. As a result, there may be a range of between 117 - (if only completed 3 times a week) 195 days (if completed 5 times a week) completed in a school year.

Since the launch of the Daily Mile it has been adopted in over 10,000 schools and nurseries worldwide (at time of writing, 859 in Ireland and 6940 in UK) according to the Daily Mile Foundation (2019). As the Daily Mile initiative is a relatively new area, limited research so far has been completed, however, Chesham et al., (2018) found in their research based in Scotland that the implementation of the daily active mile initiative could effectively increase levels of MVPA and also improve the physical fitness levels of the children involved in the initiative. Howells et al., (2019) recently reported on the children’s and teachers’ voices in the adoption of the daily mile as an active mile initiative within 3 different schools based in the South East of England. They questioned if children (across the age ranges, aged 5, aged 7 and aged 10) and teachers understood and knew why they were undertaking this new initiative. They reported that children were confused and felt like they were being cheated on, by completing a daily mile that actually was a mile and wasn’t every day! Although the teachers’ responses were positive in the undertaking of the initiative, they reported that they were doing it as it was school policy not because of the obesity plan of action or wanting to increase levels of PA. There was also some confusion identified as some teachers were using the initiative as part of a warm up to a Physical Education lesson, which was not the design or purpose of the initiative, but this was the way it had been interpreted. The children indicated (especially the 4 and 5 year olds) that it was just their running around time, they could not explain any other purpose for it. The 7 and 8 years olds reported that it was to increase their happiness levels, whilst the older children identified it was for increasing and developing fitness (Howells et al., 2019). Caution is aired therefore following these results that there is the potential for the active miles initiative to not be sustainable in the future as teachers drift from implementing it within the school day. More education for all teachers, as well as children, is needed to ensure such active miles are fully understood and continue within education settings.

## **Competition**

There is much debate around the positive and negative aspects of competition. Competition is situated within the National Curricula quite prominently within both the aims as well as purpose of study (DfE, 2013). Children are now expected to ‘engage in competitive sports and activities’ with young children taking part in competitive physical activities ‘both against self and against others’ (p.2) and for challenging situations to develop within this age phase of 5 – 7 years. As children get older (7 – 11 years) the curriculum prescribes that children should ‘play competitive games’ and ‘enjoy communicating, collaborating and competing with others’ (p.2). However, the curriculum does not

suggest how this should be done or offer help or guidance for teachers. Historically, competition continues to occur in discrete sports, mainly traditional games where one team plays against another, e.g. rugby; Gaelic football.

Howells (2015, in Sewell) proposed that when planning for competition, care and consideration is needed in terms of the amount of time actually spent on competing, especially for young children, as the House of Commons Education Committee (2013) highlighted the disadvantages of competition being that it can “deter some young children from participating in sport and PA .This is because some children can become overwhelmed within the process of competitive situations and they become flustered, which impacts their performance. They then do not perform as competently as they are able to within non-competitive situations (Passer and Wilson, 2002). If competition is to be used as per curricula guidance then it is recommended that children are set individual targets, whereby the children have set goals and specific elements within the game / competition they are trying to achieve to help the team progress or to help themselves progress. This would allow the children to focus on their own successes as well as their team’s successes and also how to and what to learn from their losses in such situations.

### **Family and Peers**

Children who come from families that are active normalise children into a physically active lifestyle (Haycock and Smith, 2012) and are more physically literate when entering school (Whitehead, 2010). Not surprisingly, parents who provide financial support and transport children to activities have better access and engagement in a wide range of physical activities than those who don’t (Rees et al. 2001) but the environment children live in can act as a barrier, with 14% of primary school children’s parents in Ireland not allowing their child actively commute to/from school, whilst in the UK, 46% of children actively commute to school, (Department of Transport, 2014), although this number has decreased since 2003. Given that peers also play a role, with associations between peer influence and physical activity levels found amongst schoolchildren in both the UK (Finnerty et al. 2010) and Ireland (Garcia et al. 2016) and that Physical Education is reported as one of the most popular subjects at school (Coulter and Woods, 2011), schools need to capitalise on this in order to promote PA and sport, particularly amongst those who may not have the network of support to be active outside of school hours.

### **CONCLUSION**

Given the documented benefits regular PA has on health outcomes and the fact that physically active children are more likely to both participate in sport and remain active into adulthood, it is a no brainer that PA should be a habitual way of life for children in their first ten years. Yet, PA levels remain low in both UK and Irish children, which impacts on their FMS proficiency and their chances of succeeding in sport as they age. Organised sport plays an important role in both countries but for those who do not participate in these, few interventions have been effective at increasing PA to Government recommendations. Active commuting remains a barrier, and in Ireland because no nationally endorsed Early Years guidelines exist and there remains no mandatory curriculum to implement PA in ECCE settings, young children are not being given the opportunity to incorporate PA into their daily lives through their education. PE is also not prioritised in Irish primary schools. The UK, although

better in that it has mandatory PE lessons, still needs to prioritise activity opportunities throughout the school day. Both countries have a long way to go if PA and sport are to fully contribute and enhance young children's lives.

## **RECOMMENDATIONS**

- 1) Specific training (both within training and as continuous professional development) in FMS for practitioners and teachers to develop isolated skills into complex skills.
- 2) Increased awareness and education for parents on the importance of outdoor time and active play during pre-school years.
- 3) The development of national activity plans to enhance PA as a normal part of daily life, through increased campaigns, social media and governmental endorsed initiatives.
- 4) To make PE a mandatory, daily subject with support and education for teachers on how to incorporate effective daily PA into the school day/lessons.
- 5) To support more active transport to/from school initiatives including walking, scootering, and cycling initiatives including making the roads safer including building more pavements and cycle paths.

This is the pre-peer reviewed version of the following book chapter: [Sport and Physical Activity during the First 10 years of Life in Ireland and the UK "], which has been published in final form at [DOI: <https://doi.org/10.4324/9780429352645>].

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