

## CHAPTER FOUR - DISCUSSION

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*“A health promoting school can be characterised as a school constantly strengthening its capacity as a healthy setting for living, learning and working”... National Health Promotion Strategy 2000-2005.*

It is widely accepted that no one intervention, by itself, is likely to produce large reductions in the prevalence of obesity or overweight children. The health problem of obesity arises from deeply rooted s and from social practices not only confined to children and given the profound consequences of childhood inactivity and poor nutrition, urgency is warranted in responding to this epidemic (Monteiro 2005). Regular physical activity is an important therapy in the primary and secondary prevention of cardiovascular disease (Sharkey 2007).

Although this study was confined to the Dublin region of Ireland and it did not tackle the issue of physical activity promotion in secondary schools on a national basis, that these findings generally support the notion that constraints and pressures on the education system affect the amount of health education and physical activity that pupils in secondary schools throughout Ireland receive.

This study has demonstrated the different experiences of children aged between 12 and 17 years of age in physical activities based upon each individual school's ethos and policies, PE curriculum, extra curricular

activities, school environment, available teaching aids/equipment and available community links.

Results from this study should spark a lively debate concerning several aspects of the means, methods and attitudes concerning the delivery of Physical Education within Secondary schools throughout Ireland.

This survey demonstrated that 75% of respondents claimed they had between one and three members of staff to provide P.E to their students. It was reported that 50% of schools facilitate between 501 and up to 800 students. 59% of schools, representing a significant majority, responded that they felt they had adequate staff to teach PE to the pupils, although assuming that all students participate in PE, this would mean that based on an average of two PE teachers per school, that each PE teacher is responsible for supervising between 250 and 400 students each week. As the National Government standard for maximum numbers per class is restricted to 30 students this would mean each teacher could be supervising up to 27 classes per week. If this is the case then surely the PE teacher to student ratio needs to be addressed to meet the demands of the school. It would be quite physically demanding for a PE teacher to teach 27 lessons of physical activity every week in addition to other subjects and/or roles within the school.

Figures from this study also suggest that the majority of schools (78.6%) offer between 60 and 80 minutes of physical education per student per week and it is presumed that this includes time for toggling in and time for getting showered and dressed. In order to achieve the recommendation for children and teenagers to be physically active for 60 minutes per day, schools are ideally placed to contribute in a significant way to this daily requirement. Although with time constraints already placed on the curriculum and with teachers and pupils under pressure regarding the delivery and attendance of other subjects, it may be worth considering new options to increase physical activity opportunities in an effort to improve upon present strategies for contributing to the recommended 60 minutes of daily physical activity. It should be pointed out that the total 60 minutes can be made up of activities before, during and after school with the support and encouragement of not only the teachers but family members as well.

In 2005, the Department of Health and Children published a report 'Obesity – the Policy Challenges' in which 93 recommendations were made and submitted to government (Health Promotion Unit, 2005)

One of the key recommendations was that children should achieve a minimum of 30 minutes dedicated physical activity every day, in all educational settings. It was also recommended that all schools should be encouraged to develop consistent school policies that promote healthy eating and active living supported by the Department of Education and Science.

It would be worthwhile to conduct further research on a local and national level to establish if such recommendations have been implemented and if so, to find out what comparisons can be made concerning the types and amount of physical activities being offered.

In 2005, Mac Phail and Halbert focusing on particular circumstances, personal rewards and costs involved in the implementation of a revised physical education syllabus in Ireland conducted a study as part of a European Physical Education Review. It was concluded that the main common constraint and pressure affecting the implementation of new and revised PE syllabuses within Irish schools, was due to an already overcrowded curriculum (Mc Phail & Halbert, 2005). Rewards and costs in implementing a new and revised syllabus were noted in respect of the examination of PE. In some instances there was a belief that examinable PE would enhance the status and recognition accorded to PE (reward). Conversely, others believed that in order to accommodate an examination syllabus in terms of timetabling and staffing, there was likely to be a reduction in non-examination PE classes across all years of post-primary education (cost). (Mc Phail & Halbert, 2005).

This survey has highlighted the fact that many schools lack the resources and facilities needed to encourage physical activity during school curriculum and as part of extra curricular activities. With 18% of schools stating that their outdoor facilities are inadequate almost double this figure reported that their indoor facilities were inadequate.

A consequence of this is that the children who don't consider themselves to be 'sporty' or 'competitive' can find themselves at a disadvantage if there are not alternative forms of activities available to them. Gender differences should be taken into account as well as issues such as compatibility and suitability to a particular activity. If the schools emphasis is totally on sports related activities this could affect those pupils who do not fall into this category thus reducing motivation to participate in PE altogether which in the long term may lead to poor lifestyle choices and a negative, perhaps even lazy attitude towards physical activity.

The study also revealed a significant lack of PE programming and range of activities within the schools. Findings seem to suggest that the focus and emphasis is on sports related activities with athletics, basketball and football being the most offered activities. Today's PE syllabus should reflect modern up to date interests and include a range of activities from structured school treks such as outdoor walks to fun group activities such as street dance classes or similar, in addition to the current sports being offered. The most popular piece of equipment reported from schools in this survey was the possession of skipping ropes but for those unfortunate pupils who don't like to skip, their choices are very limited – football, skipping and jogging.

Schools can offer many opportunities for children to be physically active, including effective PE programs, updated playgrounds, well-maintained equipment and supervised activity breaks throughout the school day.

With 79% of respondents stating that they agree with the need for continuing professional development for teachers in the areas of physical activity and health related education this reflects a positive attitude towards improving standards. It would be worthwhile for schools and PE teachers to establish links with other health promoting agencies such as training providers both in private or public sectors whereby PE teachers can receive further training in the areas of children and youth fitness. Teaching children and teenagers requires a high level of knowledge and understanding including specialist physiological considerations as well as the skills to deliver classes in a safe, effective and appropriate manner.

PE teachers should be encouraged and supported by their schools to receive additional training in these areas so that they can acquire the appropriate knowledge and skills such as;

- How to plan, teach and evaluate a safe, effective and appropriate physical activity session for children and adolescents of mixed abilities.
- How to adapt exercise and activities for children with specific needs and requirements
- Knowing the generic induction standard for people working with children and adolescents in an active leisure setting

However, it's worth raising the question – does it have to be the PE teacher that exclusively provides the physical activity sessions within the school curriculum?

With the current constraints and pressure already on teachers in schools a recommendation would be that the Department of Education allow schools to source alternative methods and modes for the delivery of physical education and activity lessons. An alternative could be to employ qualified health fitness instructors and/or physical activity co-ordinators that hold specialist qualifications in children's fitness such as Ireland's National Qualification in Health Related Physical Activity for Children and Youth or equivalent.

These instructors should have their own professional indemnity insurance and could work with schools in conjunction with and/or under the guidance of the PE teachers to plan, deliver and evaluate the physical activity lessons. This may ease the burden that is currently on PE teachers and schools. If structured physical activity lessons were implemented into the curriculum during activity breaks and as extra-curricular options before, during or after school it would certainly be a welcomed and positive change within the education system.

Investment is needed from the government to improve the resources and facilities for physical education within schools to promote health and activity amongst the youth of today so that subsequently the pressure and economic burden on our health system in the long term can be reduced. If the prevalence of obesity continues to grow, the disease burden will surely increase further.

It is not only the schools that have a responsibility to promote physical activity but also that of the parents and local authorities.

Parents can also play a critical role in nurturing active living in their children's lives, and should be included in efforts to raise awareness and build solutions. Parents could be encouraged by schools to get involved in projects such as safe routes to school or other initiatives to encourage physical activity and healthy eating during the school term.

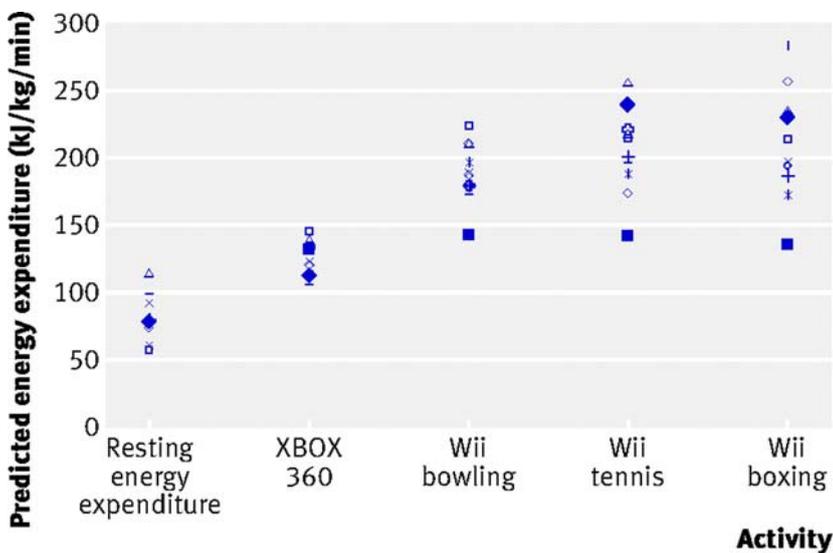
Parents who lead active lives can set a good example to their children.

Physical activity should never be used as a punishment or viewed as a chore. It should be integrated in a fun, non-threatening way to enhance the enjoyment and fun factor. The key is finding things that their children like to do and help them broaden their interests by exposing them to new and varied activities throughout their lives.

Current evidence suggests that the most popular recreational activity for the youth of today is video games. Parents can choose activity orientated video games that require movement such as the Nintendo Wii sports games that include from golf to dancing. A recent study was carried out to compare the energy expenditure of adolescents when playing sedentary and new generation active computer games. It was a cross sectional comparison of four computer games. Results indicated that the energy expenditure when playing Wii sports games was significantly greater (65.1%) than playing sedentary games (Graves et, al, 2007) (figure 28).

However, active gaming still used less energy than authentic bowling, tennis and boxing and the exercise was not intense enough to contribute towards the recommended amount of daily physical activity for children (Troost et. Al, 2002).

Given the current prevalence of childhood overweight and obesity, such positive behaviors should be encouraged.



Graves, L. et al. *BMJ* 2007;335:1282-1284

Figure 28 Participants' mean resting energy expenditure and predicted energy expenditure when playing computer games

In 2006, Cohen et al., conducted a study involving 1,556 adolescent girls and found that teenage girls reported 35 additional minutes of physical activity per week for each park located within a half-mile from home. The teens also were more active when parks were lighted and had walking paths (Cohen et al.,2006).

Local Authorities can play an extremely important and proactive role in the promotion of health and physical activity within communities. Children and teenagers living in residential areas with parks, playgrounds, trails and recreation programs tend to be more physically active than those living in neighbourhoods with fewer recreational facilities (Davison & Lawson, 2006).

If the local governments developed Safe Routes to School projects, similar to other countries this would make it safer and easier for children to walk and cycle to and from school. Facilities such as safe footpaths, cycle lanes and crossings need to be improved in areas where the safe routes could be implemented. Traffic control would need to be monitored in a safe and effective manner to reassure parents on their children's safety. With the implementation of safe routes to school this would certainly increase the number of children who walk or cycle to school daily and this increased participation of physical activity can only have a positive effect on children's health and not to mention the benefits to parents, teachers and schools such as improved concentration levels, more energy to focus on studies and possibly improved sleeping patterns.

In 2003, Staunton reported an increase in the number of children walking to school by 64 percent in two years using the safe route to school project in Marin County, USA. (Staunton et.al, 2003). In a similar analysis of 10 elementary schools in California, some routes were improved by slowing traffic and adding sidewalks and crosswalks.

Schools whose routes were improved had a 15 percent increase in the number of students who walked to school, compared to a 4 percent increase in walking among students of schools whose routes were not improved. (Boarnett et.al, 2005).

*Recommendations for Schools:*

- Increase amount of PE time on a weekly basis.
- Increase the range and types of activities offered to students – sports and non-sport related options.
- Encourage activity breaks and investigate the possibility for supervised play and activity areas.
- Broaden the range of extra-curricular activities offered to students.
- Investigate other options for physical activity instructors to work within schools alongside PE teachers.

*Recommendations for Department of Education and Science / Government:*

- More investment in resources and facilities for physical activity in schools
- Additional funding to schools for bicycle sheds and storage facilities for both teachers and pupils
- Establish new initiatives for physical activity and healthy eating within schools including safe routes to schools (walking/cycling) projects, healthy lunchboxes / school dinners, removal of junk food vending machines.
- Encourage input from schools, parents and public to implement and support initiatives.

- Additional funding for continued professional development for teachers in the areas of children's fitness and health related physical activity programmes.
- Options for professional physical activity and/or health fitness instructors from the private sector to work within schools in conjunction with PE teachers.

Further research:

Whilst the relatively small scale nature of this research limits its generalisability, the main goal of this research is to generate data which could lead to further discussion and investigation. Further research is encouraged to follow on from this survey. Surveys could be conducted on the promotion of physical activity in secondary schools in other Irish counties which would allow for inter-county comparatives concerning socio-economic differences, gender issues concerning PE, types of activities offered, resources and facilities, additional funding, extra-curricular activities etc. A national survey would be beneficial to ascertain how Ireland compares to other European and International countries with regards to participation and perceptions of physical education in Ireland and physical activity levels of Irish children and youths.

## **Conclusion**

The main goal of this study was to learn more about the quality of school PE in Dublin secondary schools. It would seem that the short comings of PE in our schools is due to time constraints within the curriculum, insufficient resources and facilities as well as the lack of a structured schedule of various activities to embrace and encourage all school children to participate.