

Introduction

The benefits of physical activity for health and wellbeing across the lifespan have been well reported. Despite this, levels of participation in physical activity remain low across many age groups, and strategies are needed to increase activity levels across the population. Identifying and using strategies that are both effective and cost-effective is important to ensure efficient use of available resources and funding. This briefing brings together the available research evidence as well as practical strategies to outline recommended approaches and actions for effectively promoting physical activity in young people aged 6-11 years old.

Most of the current research into physical activity programmes for young people has been carried out in a school setting. While more successful programmes often combine the school setting with a home or community based element, there is little research evidence on successful physical activity initiatives delivered in these other settings. Until more evidence is gathered from community and family programmes, evidence from schools may offer valuable insight into components that might help build more successful initiatives in a home or community setting.

Key recommendations and practical strategies for how best to incorporate the current evidence around physical activity promotion in young people are listed below. In order to translate research evidence into practice and develop these recommendations and practical strategies we have taken into consideration the current available evidence and identified components of interventions that are often repeated in successful research projects, as well as using experience from practice.

The recommendations are provided in two sections:

Section 1 – Promoting physical activity to young people in schools and the community

Section 2 - Promoting physical activity to young people specifically within the school setting

Section 3 - Promoting active travel to children

At the end of the document there is also a summary of the National Institute for Health and Care Excellence (NICE) public health guidance on behaviour change (PH6). This more general guidance is important to bear in mind alongside the population specific information in sections 1 and 2 when formulating physical activity initiatives.

In July 2011, the Chief Medical Officers (CMOs) from the four home countries of the UK launched new physical activity guidelines for children and young people. For more information on these guidelines, see the joint CMO report Start Active, Stay Active.



Section 1 – Promoting physical activity to young people in schools and the community

This section outlines evidence-based recommendations for actions that should be taken or components that should be put into place when planning and developing physical activity initiatives which are targeted at young people aged 6-11 years, regardless of the setting.

Each evidence-based recommendation (highlighted below) is underpinned by research findings and is followed by practical strategies to support implementation.

Aim to improve total physical activity levels by fostering positive attitudes to physical activity

To date, most studies in schools which have focused on increasing physical activity levels have only been successful at increasing levels during the school day. Furthermore, a number of programmes promoting physical activity in schools have specifically focused on activities which increase fitness, such as timed runs. While both increases in physical activity and fitness are important for health, intensive fitness activities, such as timed runs, may not inspire positive attitudes towards physical activity or lifelong behaviour changes. This may be why programmes which focus solely on fitness are not successful at changing total physical activity levels. It may therefore be more important for programmes to focus on fostering children's positive attitudes towards physical activity in the hope of influencing overall physical activity levels, which may in turn impact on fitness.

Strategies

 Create a physical activity experience that is fun and focuses on children feeling good, gaining confidence and enjoying what they do.

- Create programmes which encourage children to increase their physical activity levels throughout the whole day, not just at school.
- Promote a 'mastery climate', ie, an environment where children are encouraged to develop their individual skill levels and personal best.

Create programmes which specifically focus on physical activity behaviours

While it is undoubtedly important to address other health behaviours such as nutrition, there are concerns that focusing on multiple health behaviours may hinder the success of physical activity programmes. Therefore, when looking to change physical activity levels, it may be important to have a specific focus on changing a more limited range of behaviours, ie, create programmes that specifically focus on changing physical activity behaviours in children and do not try to address multiple behaviours.

Strategies

- Create programmes that have a specific focus on changing physical activity levels.
- Establish a high profile for physical activity by providing supportive and consistent messages regarding being physically active.

Use a multi-component approach to promote physical activity in children

It is important to ensure physical activity programmes use a multi-component approach, such as changing the school environment, implementing changes to the curriculum and incorporating a family-based element.

Successful programmes tend to use multicomponent approaches, such as offering a combination of additional physical education lessons, behavioural modification lessons and adding activity breaks throughout the day.

In contrast, programmes that have used an education only approach, have demonstrated no effect on physical activity levels in children. This may be because classroom-based lessons tend to focus on conveying information rather than offering children the opportunity to experience or practice the activities.

Strategies

- Use a multi-component approach to promoting physical activity to support change and development.
- Use strategies that combine educational, curricular and environmental elements, for example, additional PE lessons, cross curricular activities and playground markings.
- Focus on increasing the variety of physical activity opportunities available throughout the day, for example, measures to increase active travel, daily activity sessions, active classroom breaks and physical activity homework.

Provide children with an activity friendly environment

Research suggests that physical activity initiatives that target the environment may have more of an effect on increasing children's physical activity levels than those which have an educational focus. Furthermore, research suggests that it is important to provide children with a safe place to play to help promote physical activity.

Studies have shown that children are more likely to be active when they have better access to facilities in their neighbourhood and access to playgrounds with fixed equipment. During school breaks, children have been found to be more active when they have better access to equipment, permanent play structures or marked courts. Furthermore, the presence of attractive destinations, such as parks, has been linked with increased levels of physical activity in children.

Strategies

- Provide children and their parents/carers with information on and directions to activity friendly places.
- Consider creative use of non-traditional spaces for physical activity, eg, car parks outside of working hours.
- Offer access to play and recreational facilities before and after school
- Provide appropriate playground markings and/or mark out zones to separate different types of activity, eg, ball games, active games, dance and skill-based games.
- Provide some basic equipment and a sample of activity ideas for children, eg, a playground games box to illustrate how children can organise and play different activities.

Include a family or homebased element

Focusing on home-related factors, such as the home physical activity environment, parents' health behaviours and general parenting styles, appears to be important for increasing programme effectiveness. Involvement by parents and carers has also been demonstrated to be an integral part of any school-based programme promoting physical activity. Furthermore programmes without parental support tend to have a negative effect on children's belief in their ability to be physically active at home.

Programmes appear most successful when they promote physical activities which can be done within or starting from the family home.

There is mixed evidence on the effectiveness of sending written information home to parents and carers. However, methods such as offering family events, parents' and carers' meetings at school, telephone contact, or workshops for parents and carers have potential for being effective. Other studies have found family involvement in creating a supportive environment, homework assignments to complete with parents and carers and monthly newsletters to parents and carers to help encourage activity interactions with their child to be effective home-based elements.

Strategies

- Provide children with activity challenges to do at home during the weekends and/or school holidays.
- Encourage parents/carers to support their children in being active by becoming role models, being active with their child, providing opportunities for their children to be active at weekends and during holidays and promoting active travel to and from home.
- Distribute physical activity information to parents including ways in which participating will benefit their children.
- Provide activity opportunities for parents/ carers to get involved in either an adult only activity session or activities that encourage them to be active with their children.
- Include ideas for activities that can be done independently and/or require little or no equipment.

Establish programmes that are of an appropriate duration to foster behaviour change

Evidence suggests that longer physical activity initiatives, such as those which run for a whole school year, tend to have a stronger effect on total physical activity levels than those of a shorter duration. To help ensure that programmes are of an appropriate length to foster behaviour change, it may be important to work with schools and community-based organisations to guarantee consistent messages and opportunities are presented to children all year round.

Strategies

- Create links with school and community groups to ensure messages and opportunities for physical activity are promoted all year round.
- When planning activities, give consideration to how any changes or improvements can be made sustainable and can be embedded into existing provision.
- Use community and school contacts as a source of advice, support or as a resource.

- Ensure provision builds and extends on opportunities offered within the curriculum and links with opportunities available in the local community.
- Make information on community activities readily accessible to children and their parents, eg, this could be in the form of a local authority directory which has information on location, time, cost, contact person, booking information etc.
- Ensure that provision is reviewed and, if required, refreshed regularly to avoid staleness; this may involve periodically changing the time and type of activities offered.

Involve the children you are targeting to help determine appropriate provision and activities

It is important that professionals use children's views on what helps and hinders physical activity to inform programme design. By giving children a voice, it can help to highlight children's preferences, identify barriers to participation and suggest changes to increase and sustain participation.

Furthermore, enjoyment of physical activity has been linked with increases in physical activity levels in children. Therefore it is important to involve your target group of children to help establish activities which they enjoy.

- Give children a voice by consulting with them on all aspects of provision.
- Work with the target group to identify barriers hindering them from being physically active.
- Work with the target group to identify what encourages them to be physically active.
- Carry out an audit of current provision and involve children in the process to help with decision making and structuring of activities.
- Give children choice of what activities they would like to participate in.

Create programmes that are inclusive

It is important to create programmes that are inclusive to all children. There is limited evidence to suggest that it is necessary to provide physical activity programmes which target girls and boys separately in this age group. Likewise, it may not be necessary for programmes to focus on different ethnic groups. Therefore, it is important to maximise the potential for involvement for all children by ensuring that activities cater for a range of abilities.

Strategies

- Provide progressive opportunities which encourage children to develop movement skills, regardless of their age or ability.
- Adopt appropriate teaching and learning styles and include appropriate and relevant content.

Provide children with opportunities to participate in a variety of activities throughout the day

It is important to provide children with a variety of activities and times throughout the day when they can be active.

Research has shown that children tend to have greater physical activity participation levels when they are encouraged to and provided with the opportunity to try different types of physical activity. By providing more opportunities, the children are more likely to find activities that they enjoy. This is important as preference for an activity may also be associated with changes in physical activity levels.

Strategies

- Provide opportunities to try out and experience a wide variety of activities, including some which offer opportunities to be creative, eg, dancing and cheerleading.
- Provide both structured activities (eg, PE lessons and activity/sports clubs) and unstructured activities (eg, opportunities to be active at breaktimes) during school and outside of school.
- Offer access to facilities and equipment before and/or after school.

- Develop cross curricular links to increase the amount of time allocated for physical activities and provide different environments to be active.
- Introduce active classroom breaks such as Take 10, Wake up shake up and Bizzy breaks.
- Develop a school travel plan which supports the promotion of walking and cycling to and from school.
- Offer participation based clubs which are informal and offer children the chance to 'have a go'.

Consult with parents and carers to identify and address any facilitators or barriers which may be affecting their child's participation in physical activity

Research demonstrates that programmes often do not sufficiently address the barriers hindering a child's activity level. For interventions to be successful, it is important that professionals use parent's and carer's views on what helps and hinders physical activity to inform programme design. For example, it has been noted that children are more likely to participate in physical activity if their parents or carers enjoy and are supportive of the activity.

Research has shown that parents and carers are more supportive of an activity if it is easy to access, is provided in a safe environment and has activities for other members of the family available at the same time.

- Involve parents and carers in the planning and delivery of activities for children.
- Work with parents and carers to identify what they think makes an environment a safe place for their child to play.
- Keep parents and carers informed of any physical activity initiatives or schemes available to their children.
- Provide parents and carers with information on local physical activity opportunities the whole family can take part in.

Encourage children to change their screen-time habits

Research has mostly looked at how to change children's television (TV) viewing habits, although in recent years this has been expanded to all screen time (ie, TV and computer use). It is important to equip children with strategies for decreasing all screen viewing habits. While interventions that have decreased screen time may not necessarily have increased physical activity, they have offered children the opportunity to increase physical activity as that time is no longer being used for sedentary screen time. Moreover, health benefits are thought to accrue from less sitting.

Programmes which have been successful at decreasing TV viewing or screen viewing have varied in length from a few months to over three years. These programmes have used printed educational materials, education sessions and community-based strategies and were generally run by a specialist trained member of staff. Devices which regulate TVs and other screens, and switch them off after a pre-determined period,

are also successful. It may also be important to remove TV sets from a child's bedroom as having a TV set in their bedroom is associated with higher TV viewing. Self-monitoring and goal-setting are frequently used strategies for sedentary behaviour change.

- Educate children on the dangers of excessive sedentary behaviour and why it can be bad for their health.
- Encourage children to break up the amount of time they spend sitting still or lying.
- Encourage children to monitor their sedentary behaviour and record screen time (ie, TV and computer usage) before exploring ways in which it can be reduced.
- Focus on times of the day where reductions are more possible and likely, and then set goals for behaviour change.
- Encourage children to find ways they can substitute inactive or sedentary behaviours for more active ones.
- Avoid having TV sets and electronic games consoles in children's bedrooms.



Section 2 – Promoting physical activity to children specifically within the school setting

This section outlines the evidence-based recommendations for actions that should be taken or components that should be put into place when planning and developing physical activity programmes for children aged 6-11 years in schools. These recommendations are in addition to those listed in Section 1.

Each evidence-based recommendation (highlighted below) is underpinned by research findings and is followed by practical strategies to support implementation.

Develop a whole school approach which supports and promotes physical activity

Evidence suggests that curriculum strategies, when used in isolation from other environmental changes, are not effective for promoting physical activity in children. In contrast, health promotion programmes in schools which have used multi-component approaches tend to be more successful than those which only address one component. For example, a whole school, ie, multi-component approach, may be using a curriculum approach with modifications to the school culture and environment or with family and community involvement.

The main goal of a whole school approach to physical activity is to create a school ethos and environment that supports and promotes the value of physical activity in children. The below strategies are based on the National Healthy Schools Programme, which was a joint initiative between the Department of Health and the Department for Children, Schools and Families, and have been tailored to a physical activity context.

- Ensure that the school leadership and management structures support, promote and maintain changes for physical activity across the school.
- Develop a whole school PE and physical activity policy that promotes a range of activities for the whole school community throughout the school day and beyond.
- Plan a curriculum that helps promote physical activity and work with external partners to support its implementation.
- Include physical activity opportunities in all the elements of teaching and learning, for example, physically active games which also develop maths or language skills.
- Build an environment and culture within the school that is supportive of physical activity, such as, developing a culture that supports active travel for the school journey and during the school day.
- Consult with children on all aspects of physical activity provision.
- Provide support services for children, eg, specialist trained sports co-ordinator to run activities at lunchtime break.
- Address staff professional development needs to enable them to promote physical activity effectively.
- Involve parents and carers and local communities in the planning and delivery of physical activity.
- Assess, record and report children's achievements in physical activity.

Make physical activity crosscurricular

Programmes that have been successful in increasing physical activity in children have usually included some form of change to the school curriculum. Changes have ranged from making comprehensive amendments to educational materials, such as delivering a 12- week series of topical lessons with a physical activity focus, to simply providing more games equipment during break time with instructions for children on how to use it. Most successful programmes also include printed educational materials, with a few also offering audiovisual resources.

Strategies

- Explore the opportunity for ten minute classroom activity breaks.
- Consider school timetabling changes
 to allow extra time for curricular PE, eg,
 scheduling lessons either side of break
 times or lunchtimes to allow changing to be
 supervised by classroom assistants.
- Consider developing cross-curricular links to increase the amount of time allocated for physical activities and provide different environments to be active.
- Work with the management team and teachers at each individual school to determine how best to incorporate physical activity into the curriculum.
- Provide teachers with lesson plans and resources to help promote physical activity with children.
- Create printed educational materials which educators can use as supplements for traditional classroom lessons.

Offer opportunities for additional staff training

Programmes which tend to be successful are often implemented by those with additional training on physical activity delivery, such as a PE teacher or classroom teacher who has received specialist training on physical activity. It may therefore be advantageous to provide classroom teachers and other staff who lead sessions with extra

training specifically on how to promote and lead opportunities for physical activity with children.

- Keep staff informed about physical activity including benefits of physical activity, physical activity recommendations, the school's philosophy and physical activity policy, specific promotions and opportunities for children and themselves to be active.
- Consider training lunchtime supervisors to deliver playground activities.
- Encourage enthusiastic staff to consider training for relevant awards and or qualifications, eg, National Governing Body sports awards.
- Provide relevant training and support to anyone delivering activities - this could include in-house training or demonstration lessons by PE staff, a school sport coordinator or the PE co-ordinator (eg, staff and parents/carers may need training in a new activity, ways of working or in matters of health and safety), initially providing more experienced mentors for them to work alongside, and having regular discussion/ feedback sessions.
- Provide a planned annual programme of continuing professional development (CPD) for staff.
- Encourage sharing good practice by all staff, eg, adopt a procedure that teachers who attend training report back to other staff on what they learnt.
- Hold regular informal meetings with the PE co-ordinator/primary link teacher/head of PE/school sport co-ordinator.

Section 3 - Promoting active travel to children

This section outlines the evidence-based recommendations for actions that should be taken or components that should be put into place when planning and developing active travel initiatives that are targeted at children ages 6-11 years. Recommendations in this section are relevant to individuals working in a school and/or community setting.

Each evidence-based recommendation (highlighted below) is underpinned by research findings and is followed by practical strategies to support implementation.

Provide safe walking routes to popular destinations

Controlled crossings, ie, the presence of lights or pedestrians crossings, have been linked with increased walking and cycling in children. Children are also more likely to travel actively to places if pavements are available and in good condition and there are appealing destinations to walk or cycle to.

A child's perception of their safety had no association with their physical activity levels, but they were less likely to walk to places if there were more actual road hazards present, eg, high traffic density or main roads.

Strategies

- Work with schools and community groups to develop and implement school travel plans that highlight safe routes for active travel to and from school and other frequented sites.
- Provide children with maps of identified routes to popular destinations such as schools or leisure facilities which are along quieter roads, have good pavements and highlight safe crossing points.
- Identify safe places, eg, local shops, library or community centre, along routes used by children that they can visit.
- Work with local planning and transport authorities to develop, implement and

- promote safe active travel programmes, such as, walking buses, school route chains and park and stride schemes.
- Develop initiatives to ensure the local environment around schools, play areas and other well used destinations are safely accessible to children via a walking or cycling route.

Ensure there is a dedicated point of contact or leader for all active travel initiatives

While it may not always be possible to hire, for example, a part-time project co-ordinator or pay individuals to lead walking buses, it is advantageous to ensure a leader is identified and there is a method in place to ensure leader retention and commitment. Only half of the successful active travel programmes for children have reported that one or more people, eg, walk leaders or co-ordinators, were paid for their role in the programme.

Strategies

- Appoint a paid or voluntary active travel coordinator or advisor.
- Appoint paid or voluntary walk leaders.
- Provide training courses for personnel who promote or lead active travel initiatives.

There are two NICE guidance documents available for children. For more information on these guidance, search for PH17 (Promoting physical activity for children and young people) and PH41 (Walking and cycling) at: www.nice.org.uk

NICE behaviour change summary

The information on this page is a summary of the NICE (National Institute for Health and Care Excellence) public health guidance on behaviour change (2007). These strategies are important to keep in mind throughout the development, planning and implementation of physical activity initiatives regardless of the target audience or setting.

Development

- Develop knowledge of your target audience, eg, their needs, interests, barriers and facilitators.
- Conduct a needs assessment to address how personal, environmental, social and financial factors may affect the initiative.
- Develop the initiative in collaboration with your target audience.
- Develop and build on the strengths and assets of your target group, eg, current skills, talents and capacity.

Planning

- Work in partnership with individuals, communities and organisations to plan initiatives.
- Take into consideration the local context and circumstances, eg, socio-economic, cultural, social, environmental factors, when planning the initiative.
- Include structural improvements, eg, consider how changing the physical environment, access to and provision of services, service delivery may affect participation.
- Create a detailed written plan which:
 - provides the theoretical link between initiative and outcome
 - identifies the specific behaviour being targeted and why
 - justifies the models used to design/deliver the initiative
 - specifies what will be delivered, when, by whom, for how long, how often

 describes how the initiative will be evaluated, including the process and outcome measurements and the methods for evaluation.

Implementation phase

- Develop social approval for the initiative.
- Target specific groups and tailor initiatives to the target audience.
- Provide training and support for those involved in developing and delivering the initiative.

For more detailed information on behaviour change, consult: National Institute for Health and Care Excellence public health guidance 6: behaviour change (2007).

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