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# Improving awareness, attitudes and uptake of the Australian physical activity guidelines among primary school students, their teachers and parents

## **Abstract**

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**Improving awareness, attitudes and uptake of the Australian physical activity guidelines among primary school students, their teachers and parents**

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<sup>2</sup> Danika Hall is a Project Manager at the Centre for Health Initiatives. She has a background in services marketing, and her past research considered how marketing practices of the pharmaceutical industry affect Australian consumers. More recently she has worked in social marketing, including projects promoting healthy lifestyles and help-seeking behaviours with diverse audiences including adolescents, university students, retirees and children.

## **Project Overview**

The National Physical Activity (PA) Guidelines recommend children aged 5 – 12 years be physically active for at least 60 minutes every day. However there is poor public awareness and achievement of the recommendation. To address this, a pilot social marketing intervention, 'Active Play, 60 Minutes Every Day' was conducted (2012-2013). The project was successful in increasing adherence with, knowledge of, and positive attitudes towards with the guidelines. The intervention provided a fun, social experience of active play which was inexpensive, convenient and sustainable in the home and school environment. Nine active play events were held in three local primary schools, with up to 230 children engaged at each event. Children took home a variety of active toys with tailored active homework as well as printed information for their parents. Promotional messages and resources were also disseminated via paid radio ads and a website ([www.activeeveryday.org.au](http://www.activeeveryday.org.au)). Impact evaluation demonstrated a significant increase in parent awareness and knowledge of the guidelines, decrease in negative perceptions that the guidelines were difficult to achieve, increased parental support for their child to try a 'new physical skill' and increased mean number of days children were active for at least 60 mins.

## **Background and Policy Context**

Insufficient PA during childhood is associated with elevated risk factor levels for type 2 diabetes, cardiovascular disease and obesity, and poorer musculoskeletal and psychosocial health (Janssen & Leblanc, 2010). Health guidelines can serve as the foundation for public health messages and direct social marketing efforts to change public behaviours such as increasing PA levels (Tremblay & Haskell, 2012). The National PA guidelines for children are not well known (Hardy et. al, 2010) and only 20% of school-aged children achieve them (ABS, 2012). A social marketing approach was taken to improve awareness, attitudes and uptake of the guidelines, to ultimately improve child health.

## **The Social Marketing Criteria**

### **Behavioural Goals**

Awareness, belief and behavioural objectives were developed for the target markets of children and their parents. For parents these included: Improving awareness of the guidelines by 25%; Improving knowledge of guideline content by 20%; Decreasing negative perceptions that 'being active for 60 minutes every day is difficult to achieve'; Improving support of their child to try a new PA or skill by 10%; Promoting use of the APED website and resources.

For children objectives included: Learning a new skill or way to be active (30% of students); participation in school events (25% of students); use of active homework and toys at home (30% of students); and increasing the mean number of days parents reported their child participated in at least 60 minutes of PA (over the past seven days).

### **Customer Orientation**

The NSW Schools PA and Nutrition Survey found that as few as 20% of parents and 14% of Year 6 students can correctly state the recommendations of the PA guidelines (Hardy et. al, 2010). Further, the Australian Health Survey found that only 20% of school-aged children in Australia are sufficiently active and meet the guidelines (ABS, 2012). To gain further understanding of the target audience in relation to their knowledge and attitudes towards the guidelines and PA, four focus groups were conducted; two with children aged 5 – 12 years, and two with parents of children in this age group.

Another important component of formative research was stakeholder analysis. Interviews were conducted with teachers and school principals, and other project stakeholders (key local health organisations and providers of PA). Findings of the formative research were instrumental in developing detailed project objectives, the intervention, and the evaluation research.

### **Insight**

Focus groups with parents found the key benefits of PA for their children were health, cognitive and social benefits while common barriers were time constraints/competing priorities, inconvenience and cost of structured activities. Some parents believed that that children needed down days and didn't need to be active every day if they had a healthy diet/had limits to their screen-based behaviours. For children key benefits of PA were the fun and social aspects, while common barriers were self-perceptions about abilities or being "non-sporty" and competing priorities. Competition to PA was preference for sedentary pastimes, primarily screen-based activities. Based on these insights, it was important to provide a fun and social experience of PA for children, emphasising active play rather than sport. For parents, it was important to promote positive benefits and provide opportunities for their children that were convenient and inexpensive. Consultation was also undertaken with teachers and principals at three local pilot schools. This provided insights that teachers would benefit from easy-to-use resources which could be incorporated into their current routine to overcome barriers of limited time, skills and resources to facilitate PA within a crowded curriculum.

### **Segmentation**

The target audience included children aged 5 – 12 years in the pilot region, as well as their parents and teachers who enable and support their PA. Attitudinal segments within the parent and child target audiences were targeted. Parental attitudinal segments included parents that believed the PA guidelines were difficult to achieve/not necessary for their children.

Child attitudinal segments included children that perceived the PA guidelines as undesirable/did not like participating in PA (seen as sport) due to a lack of enjoyment, skill and perceiving themselves as "non-sporty". To reach these segments, it was important to shift the focus from sport to portray PA as fun, convenient, accessible and easy to achieve.

### **Exchange**

Focus group research with children found that the barriers to PA included that it is sometimes "not fun" and that they lacked skills. Benefits included the fun and social aspects of PA. As a result, the intervention provided a fun and social experience of active play and each week featured themed music, games and fancy dress (Beach Safari, Circus Clowns and Space Pirates). The games required minimal skills, and children took home free, branded active toys and homework with instructions for continued use. Focus group research with parents found that the barriers to PA included lack of time, competing priorities and financial cost. Benefits included the health, cognitive and social benefits. By providing free, supervised activities before school, and providing free active toys and active homework, we reduced the time, cost and convenience barriers. Communication materials emphasised health, social and cognitive benefits and the website suggested inexpensive/free and convenient activities and other tools.

## **Competition**

For children, the key competition was preference to engage in screen-based entertainment. Competition to PA and the guideline recommendations was the belief that children need down days and didn't need to be active every day if they had a healthy diet/had limits to their screen-based behaviours.

The provision of active toys and homework helped to address this competition. Active games at events encouraged children to engage in fantasy play that built on screen-based characters and concepts. Further, the website and printed materials targeting parents encouraged them to set limits to children's screen-based entertainment. For parents, the key competition was the belief that 60 minutes of PA was not necessary for children every day, particularly if they had a healthy diet or limits to screen time. All communication materials and activities featured the intervention brand "Active Play, 60 Minutes Every Day". Communication material including the website attempted to dispel myths associated with needing "down days" and explained the need for the daily activity as well as healthy diet and limits to screen time.

## **Theory**

Socio-ecological Theory (McLeroy et al, 1988) was utilized to inform and guide the development of the campaign. This theory has been utilised extensively to understand the multi-factorial influencers of PA behaviours of children including: individual factors (e.g. knowledge, attitudes, skills), interpersonal (e.g. social networks), the school environment (e.g. physical environment, ethos), community level factors (e.g. cultural values, norms and public policy) (Sallis & Owen, 2002). Use of this underpinning theory and its application in previous studies prompted the inclusion of strategies at each level to support knowledge and attitudinal change, promote opportunities for participation in both the school and home environments, engage parents and teachers as key influencers of behaviour, as well as stakeholders who influence broader community environments (e.g. Wollongong Council and providers of PA).

## **Marketing mix and partnerships**

*Product:* For the APED project the 'Core Product' or benefit the target audience gained by adopting the behaviour was health, social and cognitive benefits.

The 'Augmented Products' included: active toys (tools that help children to be active); an experience of how to use the toys and how to be active in a convenient and fun way; tools that help teachers and parents to help children or allow children to help themselves (active homework, planning tools, website of local activities and ideas to keep active). Over 2000 active toys and homework were distributed along with printed material for parents including over 600 each of brochures, postcards, fridge magnets and stickers promoting the guidelines. Over 300 each of postcards, brochures and posters were distributed to community organisations. *Price:* Children's perceived barriers to PA included that it is sometimes considered "not fun" and that they lacked skills. The intervention provided a fun and social experience of active play and games required minimal skills. Children took home free, branded active toys and homework with instructions for continued use. Parent's perceived barriers to PA for their children included lack of time, competing priorities and financial cost. Providing free activities before school, and free toys and homework helped reduce the time and cost barriers. *Place:* To decrease the barriers to, and increase the convenience of performing the desired behaviour, activities were organised before school and involved children as well as parents and teachers. Activities offered an introduction to a variety of fun, convenient, inexpensive games which could be performed at home or in the backyard.

The provision of free active toys and active homework allowed the project brand to be taken “into the home” providing both reminders and something to do as an alternative to screen based or other sedentary behaviours. A website provided PA options for children in the local and surrounding neighbourhood as well as ideas of how to be active at home. *Promotion*: Key messages were developed for each of the target audiences to address knowledge, attitude and behavioural objectives.

Promotional activities included radio advertisements broadcast on two local stations, news stories on two local television stations, a website - [www.activeeveryday.org.au](http://www.activeeveryday.org.au) which provided information and support for parents and teachers as well as posters, brochures, and postcards that were handed out or displayed at schools, and advertisements published in school newsletters. Printed materials were distributed in the local community. *Partnerships*: The project steering committee included PA and social marketing experts working in partnership with Children’s Services at the local council and the Health Promotion Service of the Local Health District. Partnerships enabled access to schools (via existing relationships and programs) and teacher networks, and partner organisation staff volunteered with intervention implementation and promotional activities.

### **Evaluation, results and lessons learned**

The school intervention was evaluated with a pre/post survey of parents at participating schools. Of 159 parents who completed survey questionnaires in the intervention, 79 completed both pre and post-questionnaire and were included for statistical analyses.

The intervention was successful in achieving or exceeding the objectives for parents including:

- Improved ( $p<0.5$ ) in parent awareness of the guidelines (from 24% to 59%,  $p<0.5$ ),
- Improved parental knowledge of the guideline content from 45% to 76% ( $p<0.0001$ )
- Decreased negative perceptions that being active for 60 minutes every day is difficult to achieve (Mean score: Pre 2.49 to Post 2.21;  $p<0.5$ ).
- Encouraged their child to try a new PA or skill (Mean score; Pre 3.63 to Post 3.85,  $p<0.05$ )
- Used the APED website (538 visits to the website in a five month period, including 386 unique visitors and 1461 page views).

The program was also successful in achieving objectives set for children including:

- Learned a new skill or way to be active (47/79, 58%)
- Participated in school events (n = 140-230 per school at each of the 9 events)
- Used active homework and toys at home (n=49/79, 62%)
- Increased mean number of days parents reported their child participated in at least 60 minutes of PA (over the past seven days) from 4.29 to 4.79,  $p<0.05$ .

It is hoped that the success of this pilot project, using a comprehensive social marketing approach, will inform future dissemination of the national PA guidelines for children.

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