Teacher perceptions on the delivery and implementation of movement integration strategies: The CLASS PAL (Physically Active Learning) Programme

A.C. Routen[a,*], J.P. Johnston[b], C. Glazebrook[c], L.B. Sherar[a]

[a] School of Sport, Exercise and Health Sciences, Loughborough University, Loughborough, LE11 3TU, UK
[b] School of Science and Technology, Nottingham Trent University, Nottingham, NG11 8NS, UK
[c] School of Medicine, Division of Psychiatry and Applied Psychology, University of Nottingham, Nottingham, NG7 2UH, UK

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ABSTRACT

Children sit for extended periods in the school classroom. Movement integration (MI) methods (e.g. active breaks, physically active lessons) could be used to break/reduce sitting time and improve classroom behaviour and engagement. Limited evidence is available on teacher perceptions of what influences the implementation of MI. Interviewed primary school teachers reported factors perceived to influence implementation at a variety of levels including individual (e.g. teacher and pupil characteristics, time, behavioural management) and school (e.g. whole school approach; and external to school expectations). In addition suggestions for increasing adoption and implementation of MI (e.g. communicating MI initiatives to schools) were identified.

1. Introduction

Children of primary school age in the United Kingdom (UK) engage in sedentary behaviour ((low energy expenditure activities) in a seated or reclined position during waking hours (Sedentary Behaviour Research Network, 2012)) for between 5 and 7 h per day (Griffiths et al., 2013). In addition, levels of participation in moderate-to-vigorous physical activity are low (Griffiths et al., 2013). Schools are frequently used as contexts for promoting children's health due to the ability to maximise reach, availability of existing resources, and possibility of curricular integration and sustainability (Fairclough et al., 2013). Children spend a large proportion of the school day seated and it is estimated that in primary schools children are seated for 50–70% of their time in the classroom (Clemes et al., 2015). Integration of physical activity into normal academic classroom time could break up or reduce sitting and may have added academic benefits such as improved attention to task, motivation and enjoyment of learning, and attainment in certain subjects (Grieco, Jowers, Errisuriz, & Bartholomew, 2016; Martin & Murtagh, 2017; Mullender-Wijnsma et al., 2016; Vazou, Gavrilou, Mamalaki, Papanastasiou, & Sioumala, 2012).

A number of methods to integrate physical activity within the classroom have been trialled (Norris, Shelton, Dunsmuir, Duke-Williams, & Stamatakis, 2015b; Webster, Russ, Vazou, Goh, & Erwin, 2015) and these can be termed as movement integration (MI) interventions. In general MI approaches have included breaking lesson time with short (3–5 min) physical activity breaks of varying intensities. These are often referred to as movement breaks, 'energisers', or 'fitness breaks' and are delivered with or without associated educational content. MI can also include more extensive activities where lessons incorporate physical activity into the

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* Corresponding author.
  E-mail address: a.c.routen@lboro.ac.uk (A.C. Routen).

delivery of academic content, for example by counting steps walked around the room to estimate distance i.e. physically active lessons. As well as these more traditional MI approaches, environmental restructuring via the introduction of standing desks (Clemes et al., 2015; Sherry, Pearson, & Clemes, 2016) or activity equipment (McCrady-Spitzer, Manohar, Koepp, & Levine, 2014) into the classroom has also been trialled to promote a reduction in sitting and an increase in standing and/or stepping. Delivery of MI in primary schools, although likely influenced by senior school leaders and colleagues, is largely under the control of the classroom teacher. It is particularly important, therefore, to understand teachers' perceptions of factors that may influence this, and how they can be engaged and supported to deliver MI (Webster, Russ et al., 2015).

Teachers' perceptions of using MI in primary school classrooms have been examined in a number of qualitative studies, which have largely been conducted in the United States (Cothran, Kulinna, & Garn, 2010; Finn & McInnis, 2014; Gately, Curtis, & Hardaker, 2013; Goh et al., 2013; Howie, Newman-Norlund, & Pate, 2014; Mcmullen, Kulinna, & Cothran, 2014; Norris, Shelton, Dunsmuir, Duke-Williams, & Stamatakis, 2015a; Vazou & Skrade, 2014) and have offered some insight into barriers to and facilitators of both the delivery (i.e. the behaviour of carrying out MI) and implementation (i.e. the processes by which MI is integrated into routine practice within the school/classroom) of MI. For example, possible threat to classroom control (i.e. off task behaviour from pupils) from active breaks is a particular concern for primary and secondary school teachers, and pupil enjoyment and connection to academic content may positively influence their decision to implement breaks or not (McMullen et al., 2014). To date, however, studies have largely focused on understanding delivery issues related to a single standardised MI intervention (e.g. Moving to Learn Ireland' – McMullen, Martin, Jones, & Murtagh, 2016). There is a distinct need for further work to a) examine teacher's perceptions of issues related to the delivery and implementation of a comprehensive MI approach (i.e. not simply responses to a specific pro-gramme/product), and b) a wider range of MI types (i.e. breaks, physically active academic lessons, active routines, standing desks etc.). In addition there is very limited evidence in relation to teacher perceptions of MI in the UK primary school context (Gately et al., 2013; Norris et al., 2015a).

The CLASS PAL (Physically Active Learning) programme aims to co-produce (with teachers and schools) and evaluate a MI package to support primary school teachers in reducing and breaking-up the sitting time of pupils in the school classroom. As part of the intervention development work for this project (see Routen, Biddle et al., 2017 and www.classpal.org.uk for further information) primary school staff were recruited to take part in qualitative interviews and focus groups to explore their current MI practice, views on previously published MI strategies, MI resources and training needs, and factors perceived to be associated with implementation of MI interventions.

The aim of this paper is to present a focused analysis of data exploring primary school class teacher's views on MI to identify perceived factors associated with MI delivery and implementation in the UK primary school environment.

2. Methods

2.1. Ethics

Ethical approval was granted by the University of Loughborough Human participant's ethics sub-committee (SSEHS-1824, 16/03/2015). All participants provided written informed consent prior to participation, and were informed of their right to withdraw at any time without negative consequence. All gathered personal data were anonymised using a unique identification number, with all hard copy data securely stored in locked filing cabinets/drawers and electronic information stored on password protected university computers/servers.

2.2. Sampling, recruitment and participants

A purposive sampling approach was used. Initially 4 schools in the city of Leicester and 5 schools in the town of Loughborough (all in the East Midlands region of the UK) were contacted via an email detailing the study aims and requirements of involvement. These introductory emails were followed up with a phone call or repeat email from a member of the study team. One school (11% response rate) gave consent and an interview/focus group date was arranged. Next, all 28 primary schools within the town of Loughborough (with available information from http://www.education.gov.uk/edubase/home.xhtml) were emailed, and those schools who replied were followed up with a phone call. In addition teachers with existing links to the study team were also contacted. A further five schools were recruited at this stage (17% response rate).

In total 19 teachers and six teaching assistants were recruited from 6 schools. The majority of participants were female (21/25) and their years of experience ranged from 1 year to 31 years (Table 2).

2.3. Procedure

Semi-structured face-to-face interviews were primarily used in this study. Where schools wished to limit the time burden of their teachers' participation, or where a number of teachers were available at a given time, focus groups were used to maximise data capture. In the interviews participants were questioned individually with no other school staff present, and in most cases were conducted by one member of the research team experienced in conducting qualitative interviews (ACR or JPJ). Likewise focus groups were facilitated in most cases by one member of the research team experienced in running focus groups (JPJ). Interviews averaged 41 min, and focus groups 37 min. Interviews and focus groups were conducted between March and July 2015 and took place either in schools or at Loughborough University.