

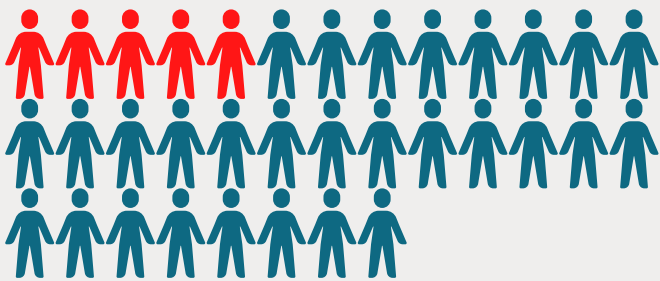
# The Impact of Motor-Development Approaches to Teaching Physical Education upon the Self-Regulation of Primary 1 and 2 Pupils within the Scottish Education System

## The Intervention

**Better Movers and Thinkers (BMT)** is a motor development approach to teaching physical education designed to effectively develop, enhance, and foster self-regulation skills within the learning process.



## BMT Implementation



Following pre-intervention tests, the BMT intervention was delivered to 30, primary 1-2 pupils for 30 minutes, five times per week by their classroom teachers (n=4). Over the course of the intervention, pupils engaged in a total of 20 hours of BMT and learned 8 separate routines.

## Data Collection



### Focus Group Interviews

Qualitative data upon pupils' perceptions of BMT was gathered via three focus group interviews consisting of 6 pupils (n=18).



### Reflective Journals

Qualitative data upon teachers' perceptions of BMT was gathered via reflective journals. Teachers reflected via journals twice across the research process.



### Response to Challenge Scale

Pre and post quantitative data upon pupil self-regulation was gathered via the Response to Challenge Scale (RCS). Here, pupils completed an 8-item challenge course whilst observers rated components of their regulation.

## Qualitative Results

### Perceived Skill Level

*"I can move my arms and legs better now and it helps me to do things like running and skipping in sports day"*

*"I have noticed my children displaying more competent motor skills"*

### Readiness To Learn

*"If my brain is stuck and I do BMT it helps me think better afterwards. I can think more"*

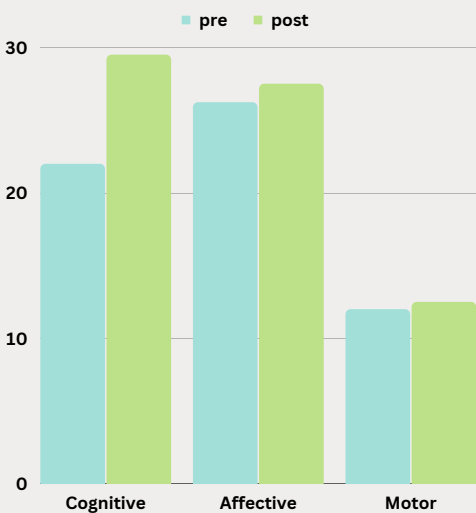
*"A new way of learning which catches their attention from the offset"*

### Wellbeing

*"I found it super fun I always couldn't wait to come into school"*

*"It is clear that the children enjoy BMT as they are constantly asking when we will be doing it next"*

## Quantitative Results



The RCS measured regulation across three sub-scales: cognitive, affective and motor regulation. Quantitative data analysis revealed an effect between pre and post-test conditions in the domains of **cognitive-regulation (p=0.000)** and **affective-regulation (p=0.042)** however, displayed no significance within the domain of motor-regulation (p=0.067). The graphic left shows a comparison of the pre and post RCS mean scores.

## Implications for Future Practice

The correlations between BMT and its potential to develop both cognitive and affective regulation amongst children reveals promising initial results which must be further pursued. Such evidence may help to encourage policymakers to rethink traditional approaches to PE, substantiating BMT as an integral element of the mainstream PE curriculum and as a tool for Covid-Recovery. Such forward thinking has the potential to develop key skills, improve well-being and provide children with the foundations to engage in a lifelong relationship with PA.