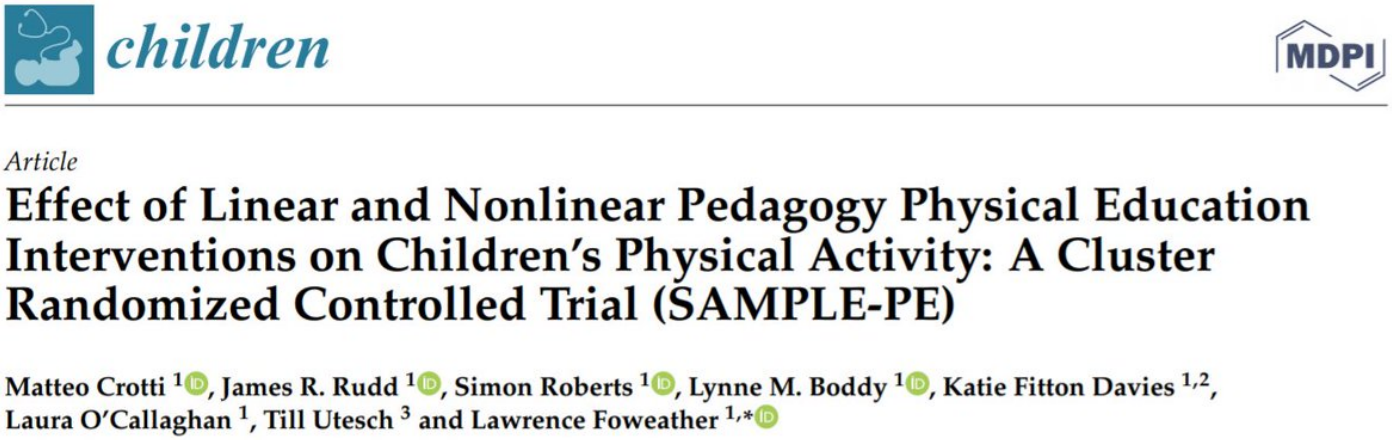
Twitter Thread by Greg Spencer



Greg Spencer
@SingleBlade1

What does it take to sustain screwiness in the way the world works? Mostly, it's just good people, trying their best to get us to a better place... within constraints which pretty much preclude us actually getting anywhere! A case in point with

These authors come across as hugely committed to something we might all agree upon: improving young people's experiences of physical education through better school-based-interventions. Sounds great? Agreed, & pretty much everything about their study models best practice ■



children

MDPI

Article

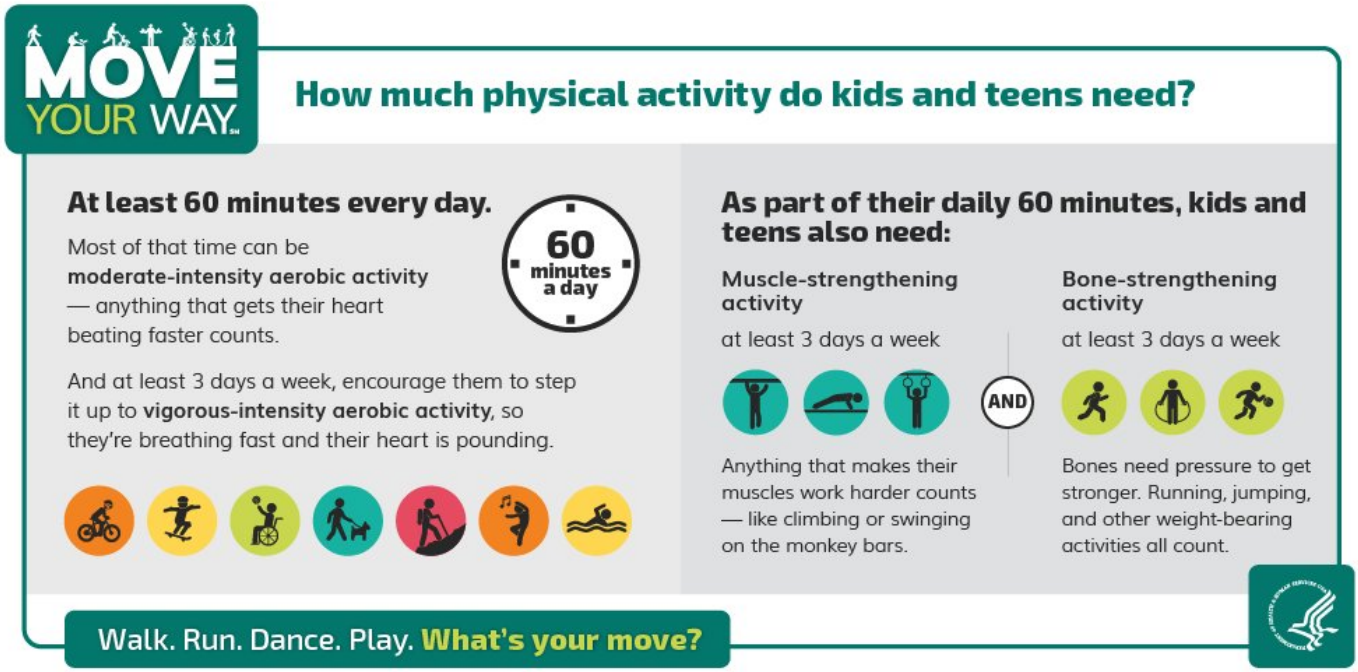
Effect of Linear and Nonlinear Pedagogy Physical Education Interventions on Children's Physical Activity: A Cluster Randomized Controlled Trial (SAMPLE-PE)

Matteo Crotti [1], James R. Rudd [1], Simon Roberts [1], Lynne M. Boddy [1], Katie Fitton Davies [1,2], Laura O'Callaghan [1], Till Utesch [3] and Lawrence Foweather [1,*]

Sadly, established "best practice" involves further embedding the medicalisation of PE as if it should be about the potential contribution of physical activity to everything from quality of life, self-perception & cognition to the likelyhood of becoming healthy & active adults ■

Increased physical activity (PA) in children is associated with positive effects on quality of life [1], self-perception [2], cardiovascular fitness [3], metabolic function [4] and cognition [5]. Children who are physically active are also more likely to become healthy and active adults [6]. Despite these benefits, a large number of children across the globe do not engage in the recommended guidelines of 60 min of moderate-to-vigorous physical activity (MVPA) per day for healthy growth and development [7–11], with children from areas of deprivation participating in even lower levels of PA [12]. In view of this, a global call of action was raised to increase PA in children using interventions that could be feasibly implemented at scale [13].

We're reminded of the Chief Medical Officer's "recommended guidelines of 60 min of moderate-to-vigorous physical activity (MVPA) per day for healthy growth and development" ■ This is a focus on what we can easily measure (generic) rather than on what we might value (individual).



We get recognition that PE "is not merely an opportunity for children to engage in PA" but that's linked to its role in "the development of knowledge & skills to foster their PA engagement throughout life" - so further focus on health outcomes. A long way from @meaningfulPE ■



We're reminded of the role of International & national PE curriculum guidelines in relation to "movement competence" & of evidence showing "children possessing high movement competence being more likely to engage in PA during their adolescence and adulthood" - @MeaningfulSport?



We get an absolutely exemplary introduction to linear & non-linear pedagogy. The paper is worth highlighting for this alone! The writing is clear, engaging & authoritative, & evaluating theoretically informed approaches is surely a good thing if we seek evidence based practice ■

In summary, primary (elementary) PE is an important setting for PA promotion and child development, especially for children from areas of high deprivation who participate in less PA compared to children from more affluent areas. Movement competence is an important outcome of PE and enhanced learning experiences in PE, based on motor learning theory, could lead to greater engagement in PA compared to atheoretical approaches used in current practice. To the best of our knowledge, no study has examined the effect of linear and nonlinear pedagogy PE interventions on children's habitual PA and, more broadly, there is a lack of evidence concerning how interventions aimed at improving movement competence might affect children's PA [21,41,43]. Therefore, the aim of this study was to evaluate the effect of linear and nonlinear pedagogy PE interventions on the PA levels of 5–6-year-old children from areas of high deprivation.

Sadly, we're then assured "generalist primary school teachers lack the confidence and competence to effectively teach PE" ■ Misguided initiatives associated with London 2012 strike again! Does anyone REALLY think coaches can replace teachers? Well, maybe if you think PE = PA ■

Given that most of the generalist primary school teachers lack the confidence and competence to effectively teach PE [58], coaches were recruited to deliver the linear and nonlinear pedagogy PE interventions. This in line with current practice in primary PE in England where the majority of primary schools currently employ sports coaches from external providers to deliver PE [59]. Intervention deliverers (coaches) were recruited from a university in-house coaching provider and within the research team. Coaches were required to hold a Level 2 UK coaching qualification in any sport. All of the PE coaches

So experts in coaching, who didn't know the children, collaborated to produce a scheme of work and lesson plans & trained coaches to deliver sessions in schools.

In one sentence, that's pretty much everything that's currently screwy with British PE ■
https://t.co/jn1OInfpxc

As ever, a focus on what's easily measured (e.g. Physical Activity as tracked on ActiGraph GT9X accelerometers) runs the risk of us missing what we truly value (e.g. visceral responses, young people finding meaning in movement, connection to a pastime) ■
https://t.co/biZcCRl75G

Shock: the researchers found EXACTLY what any teacher would anticipate - "enhanced PE would need to be extended & supplemented by whole school approaches to PA promotion & multi-component interventions targeting home & community settings to increase PA among this population" ■

This study aimed to evaluate the effect of linear and nonlinear pedagogy PE interventions on the PA levels of 5–6-year-old children from areas of high deprivation. Our findings suggest that participation in the linear and nonlinear pedagogy PE interventions did not lead to increased PA compared to participation in the control group. This lack of intervention effect was generally consistent across intention to treat and complete case analysis and across all PA metrics and whole week (habitual), weekend, weekday in school and weekday outside of school segmented periods for PA. These findings suggest that enhanced PE would need to be extended and supplemented by whole school approaches to PA promotion and multi-component interventions targeting home and community settings to increase PA among this population.

The authors suggest "for children this age, daily activities are generally dictated by adults" & highlight parents-as-partners as a strategic priority - but whilst perhaps news to coaches, that's already a long-standing priority for Early Years Professionals & Primary Teachers!



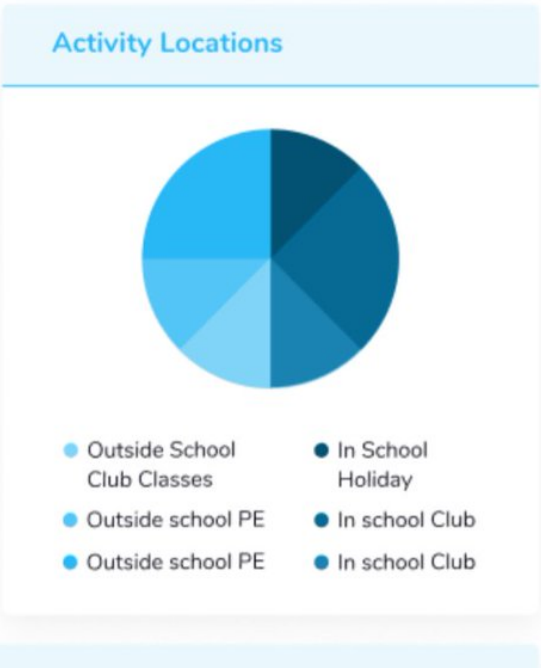
In the end, the paper concedes that teachers *might* actually offer more than coaches for PE... but what sort of academy have we shaped if *that* is news? We've always known this, & people like @Greg_Dryer, @VicksRandall82 & @Jools_CP have been saying so - loudly & consistently!

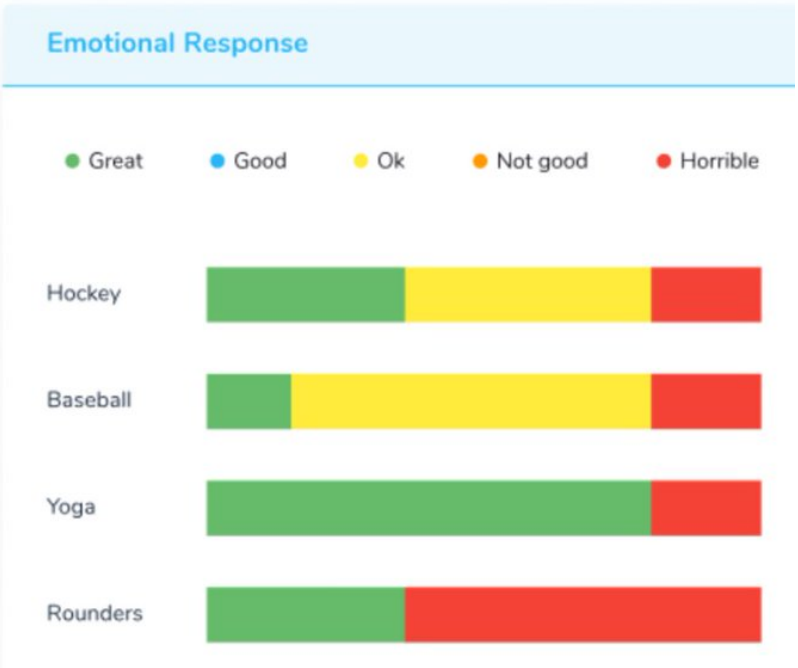
training schoolteachers to deliver pedagogical approaches might be a more cost-effective way for schools to provide PE interventions rather than paying external coaches. Furthermore, trained schoolteachers could feasibly apply pedagogical principles outside PE, such as during playtime, during after-school activities or during school sport events, and they could more easily provide an intervention for the entire duration of a school year. Moreover, schoolteachers have a closer relationship with parents compared with external coaches and might inform them about the importance of providing children with increased PA opportunities.

Our academic output also needs to connect with real-world values. No-one can ethically build "partnership" by "informing" parents about anything - least of all the "expert" view of "the importance of providing children with increased PA opportunities" ■
https://t.co/LrBXWCNowt

What might be better? For starters, an academy & wider sector which actually took the educational world & teaching expertise (rather than PA, sport & coaching) as a starting point - one which connected with @fhcappg & with people like @jackiemmusgrave ■
https://t.co/CFC61gNrsG

What might we measure? Maybe start with the question asked by @miMoveApp: how did the activity feel? Though needing development, the self-interpretation of "emotional response" is a massive step towards having a lead-indicator measuring attitudes & dispositions ■ #becausehuman





For more substantial studies, research needs to connect to lead indicators rather than to lag indicators & to build on decades of progress in sense-making - e.g. this approach to crowd-sourcing human judgement, meaning, and feeling @snowded/@CynefinCentre
https://t.co/QK4bmOz4LK

Please note: I am not suggesting this paper is anything other than an exemplary product of our current system. The authors should be applauded for excellent work - but when the context in which research is done leads to such work, we need to ask questions!
https://t.co/uAAJzNvzFh